=> fil reg
FILE 'REGISTRY' ENTERED AT 17:53:45 ON 11 JUN 2003
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

STRUCTURE FILE UPDATES: 10 JUN 2003 HIGHEST RN 528811-66-7
DICTIONARY FILE UPDATES: 10 JUN 2003 HIGHEST RN 528811-66-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

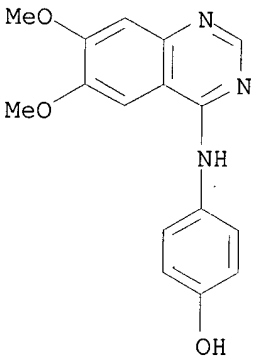
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d ide can

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN **202475-60-3** REGISTRY
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4-(4'-Hydroxyphenyl)amino-6,7-dimethoxyquinazoline
CN WHI-P 131
FS 3D CONCORD
MF C16 H15 N3 O3
CI COM
SR CA
LC STN Files: ANABSTR, BIOSIS, BIOTECHNO, CA, CAPLUS, DRUGNL, DRUGUPDATES, EMBASE, PHAR, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

27 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
27 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 137:320073

REFERENCE 2: 136:272618

REFERENCE 3: 135:221035

REFERENCE 4: 135:132432

REFERENCE 5: 135:41029

REFERENCE 6: 135:29154

REFERENCE 7: 134:366897

REFERENCE 8: 134:363426

REFERENCE 9: 134:141589

REFERENCE 10: 133:271682

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=> fil reg
FILE 'REGISTRY' ENTERED AT 16:59:48 ON 11 JUN 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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provided by InfoChem.

STRUCTURE FILE UPDATES:   10 JUN 2003  HIGHEST RN 528811-66-7
DICTIONARY FILE UPDATES:  10 JUN 2003  HIGHEST RN 528811-66-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d ide can 18

L8    ANSWER 1 OF 2  REGISTRY  COPYRIGHT 2003 ACS
RN    211555-04-3  REGISTRY
CN    Phenol, 2-bromo-4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI)  (CA INDEX
      NAME)
OTHER NAMES:
CN    WHI-P 154
FS    3D CONCORD
MF    C16 H14 Br N3 O3
CI    COM
SR    CA
LC    STN Files:   BIOSIS, CA, CAPLUS, DRUGNL, DRUGUPDATES, PHAR, SYNTHLINE,
        TOXCENTER, USPAT2, USPATFULL
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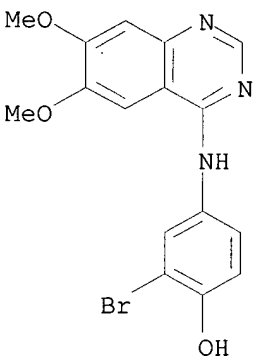

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 - 703-308-4498
jan.delaval@uspto.gov

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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

             23 REFERENCES IN FILE CA (1957 TO DATE)
              1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             23 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE   1:  138:248178
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REFERENCE 2: 138:71823

REFERENCE 3: 138:20416

REFERENCE 4: 135:41029

REFERENCE 5: 134:363426

REFERENCE 6: 133:271682

REFERENCE 7: 133:266866

REFERENCE 8: 133:187943

REFERENCE 9: 133:53698

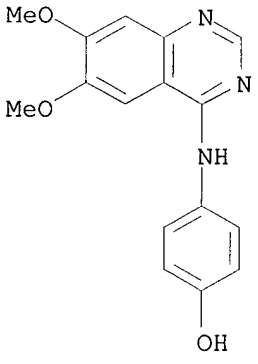
REFERENCE 10: 132:342816

=> d ide can 19 tot

L9 ANSWER 1 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-85-4 REGISTRY
CN Carbonic acid, compd. with 4-[(6,7-dimethoxy-4-quinazolinyl)amino]phenol (1:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, carbonate (1:1) (salt) (9CI)
MF C16 H15 N3 O3 . C H2 O3
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

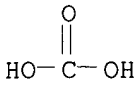
CRN 202475-60-3
CMF C16 H15 N3 O3



Salt p

CM 2

CRN 463-79-6
CMF C H2 O3



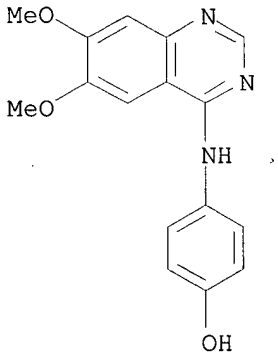
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 2 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-84-3 REGISTRY
CN Carbonic acid, compd. with 4-[(6,7-dimethoxy-4-quinazolinyl)amino]phenol (1:2) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, carbonate (2:1) (salt) (9CI)
MF C16 H15 N3 O3 . 1/2 C H2 O3
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

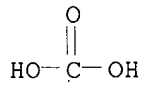
CM 1

CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

CRN 463-79-6
CMF C H2 O3



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

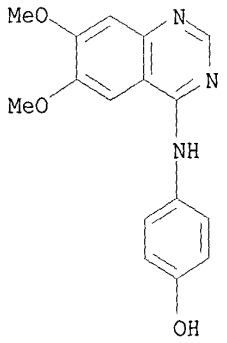
REFERENCE 1: 134:366897

L9 ANSWER 3 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-83-2 REGISTRY
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, nitrate (salt) (9CI)

(CA INDEX NAME)
MF C16 H15 N3 O3 . x H N O3
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

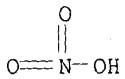
CM 1

CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

CRN 7697-37-2
CMF H N O3



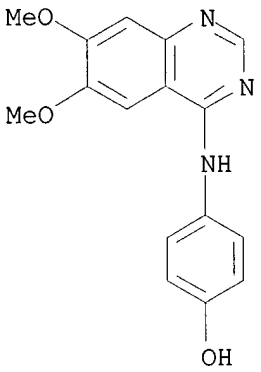
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 4 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-82-1 REGISTRY
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, sulfate (salt) (9CI)
(CA INDEX NAME)
MF C16 H15 N3 O3 . x H2 O4 S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

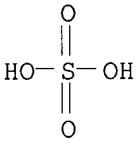
CM 1

CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

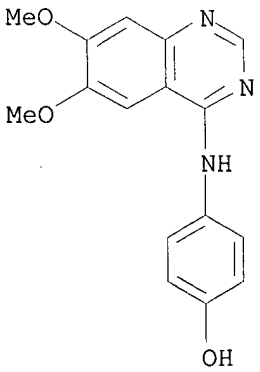
CRN 7664-93-9
CMF H2 O4 S



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 5 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-81-0 REGISTRY
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, hydrochloride (9CI) (CA INDEX NAME)
MF C16 H15 N3 O3 . x Cl H
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
CRN (202475-60-3)



●x HCl

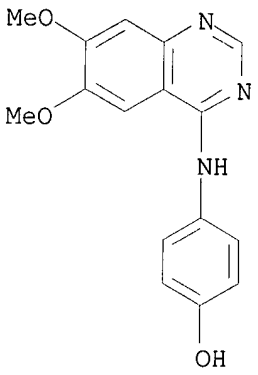
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 6 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-80-9 REGISTRY
CN 1,2,3-Propanetriol, 1-(dihydrogen phosphate), compd. with 4-[(6,7-dimethoxy-4-quinazolinyl)amino]phenol (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, compd. with 2,3-dihydroxypropyl dihydrogen phosphate (9CI)
MF C16 H15 N3 O3 . x C3 H9 O6 P
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

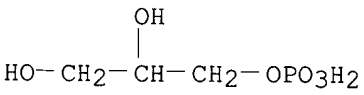
CM 1

CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

CRN 57-03-4
CMF C3 H9 O6 P



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

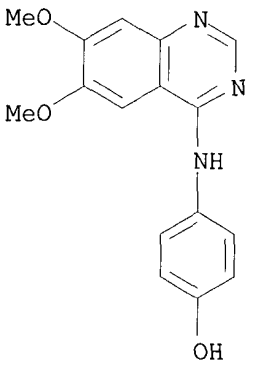
REFERENCE 1: 134:366897

L9 ANSWER 7 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-79-6 REGISTRY
CN Pentanedioic acid, 2-oxo-, compd. with 4-[(6,7-dimethoxy-4-quinazolinyl)amino]phenol (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, 2-oxopentanedioate (salt) (9CI)
MF C16 H15 N3 O3 . x C5 H6 O5

SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

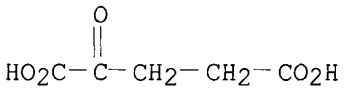
CM 1

CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

CRN 328-50-7
CMF C5 H6 O5



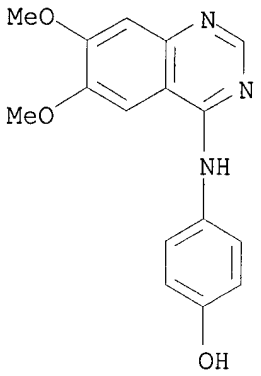
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 8 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-78-5 REGISTRY
CN L-Ascorbic acid, compd. with 4-[(6,7-dimethoxy-4-quinazolinyl)amino]phenol (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, L-ascorbate (salt) (9CI)
FS STEREOSEARCH
MF C16 H15 N3 O3 . x C6 H8 O6
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

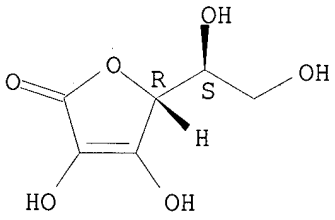
CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

CRN 50-81-7
CMF C6 H8 O6

Absolute stereochemistry.



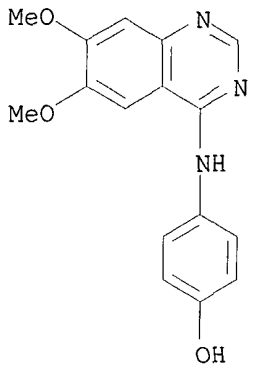
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 9 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-77-4 REGISTRY
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, benzoate (salt) (9CI) (CA INDEX NAME)
MF C16 H15 N3 O3 . x C7 H6 O2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

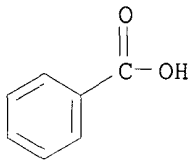
CM 1

CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

CRN 65-85-0
CMF C7 H6 O2



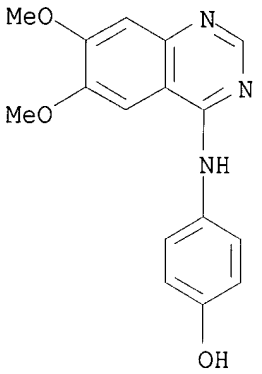
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 10 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-76-3 REGISTRY
CN Butanedioic acid, compd. with 4-[(6,7-dimethoxy-4-quinazolinyl)amino]phenol (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, butanedioate (salt) (9CI)
MF C16 H15 N3 O3 . x C4 H6 O4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

CRN 110-15-6
CMF C4 H6 O4

$HO_2C-CH_2-CH_2-CO_2H$

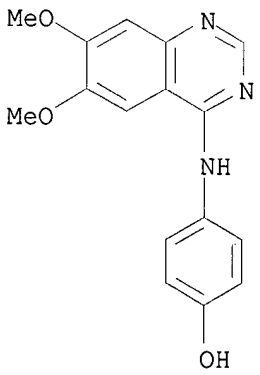
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 11 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-75-2 REGISTRY
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, (2R,3R)-2,3-dihydroxybutanedioate (salt) (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C16 H15 N3 O3 . x C4 H6 O6
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

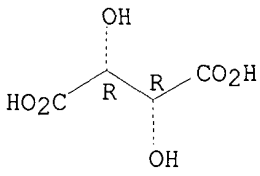
CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

CRN 87-69-4
CMF C4 H6 O6

Absolute stereochemistry.



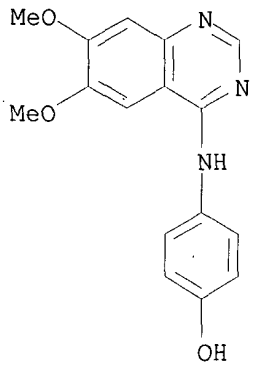
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 12 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-74-1 REGISTRY
CN Propanedioic acid, compd. with 4-[(6,7-dimethoxy-4-quinazolinyl)amino]phenol (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, propanedioate (salt) (9CI)
MF C16 H15 N3 O3 . x C3 H4 O4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

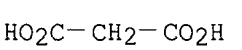
CM 1

CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

CRN 141-82-2
CMF C3 H4 O4



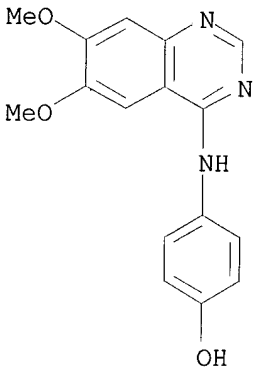
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 13 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-73-0 REGISTRY
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, 2-hydroxy-1,2,3-propanetricarboxylate (salt) (9CI) (CA INDEX NAME)
MF C16 H15 N3 O3 . x C6 H8 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

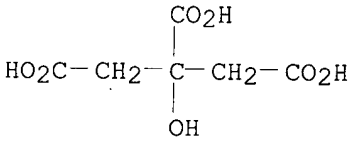
CM 1

CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

CRN 77-92-9
CMF C6 H8 O7



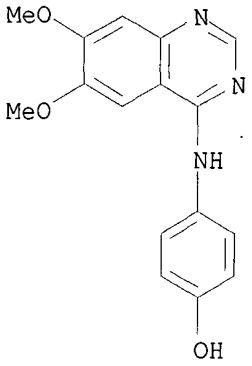
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 14 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-72-9 REGISTRY
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, acetate (salt) (9CI) (CA INDEX NAME)
MF C16 H15 N3 O3 . x C2 H4 O2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

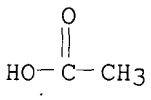
CM 1

CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

CRN 64-19-7
CMF C2 H4 O2



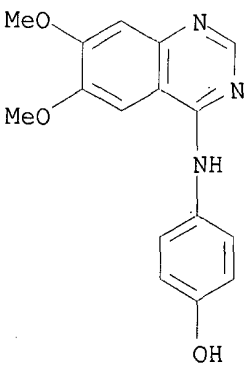
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 15 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-70-7 REGISTRY
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, methanesulfonate (salt) (9CI) (CA INDEX NAME)
MF C16 H15 N3 O3 . x C H4 O3 S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

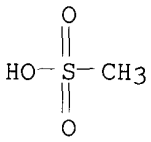
CM 1

CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

CRN 75-75-2
CMF C H4 O3 S



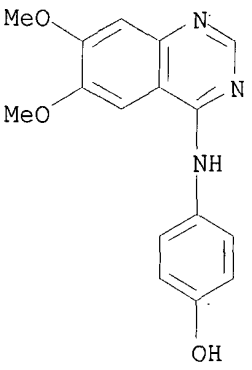
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 16 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 340176-69-4 REGISTRY
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, 4-methylbenzenesulfonate (salt) (9CI) (CA INDEX NAME)
MF C16 H15 N3 O3 . x C7 H8 O3 S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

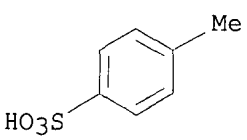
CM 1

CRN 202475-60-3
CMF C16 H15 N3 O3



CM 2

CRN 104-15-4
CMF C7 H8 O3 S



1 REFERENCES IN FILE CA (1957 TO DATE)

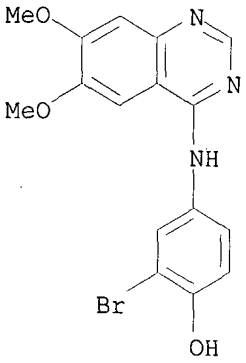
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:366897

L9 ANSWER 17 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 324035-85-0 REGISTRY
CN Phenol, 2-bromo-4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, monohydrochloride, compd. with methanol (1:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Methanol, compd. with 2-bromo-4-[(6,7-dimethoxy-4-quinazolinyl)amino]phenol monohydrochloride (1:1) (9CI)
MF C16 H14 Br N3 O3 . C H4 O . Cl H
SR CA
LC STN Files: CA, CAPLUS

CM 1

CRN 211555-04-3
CMF C16 H14 Br N3 O3



CM 2

CRN 67-56-1
CMF C H4 O

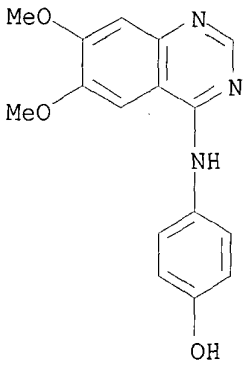
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:155488

L9 ANSWER 18 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 303022-14-2 REGISTRY
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, monohydrochloride, compd. with methanol (1:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Methanol, compd. with 4-[(6,7-dimethoxy-4-quinazolinyl)amino]phenol monohydrochloride (1:1) (9CI)
MF C16 H15 N3 O3 . C H4 O . Cl H
SR CA
LC STN Files: CA, CAPLUS

CM 1

CRN 188829-39-2 (202475-60-3)
CMF C16 H15 N3 O3 . Cl H



● HCl

CM 2

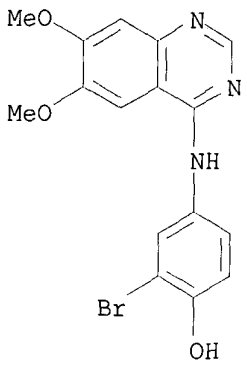
CRN 67-56-1
CMF C H4 O

H_3C-OH

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 133:327883

L9 ANSWER 19 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 296234-84-9 REGISTRY
CN Phenol, 2-bromo-4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, monohydrochloride (9CI) (CA INDEX NAME)
MF C16 H14 Br N3 O3 . Cl H
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
CRN (211555-04-3)

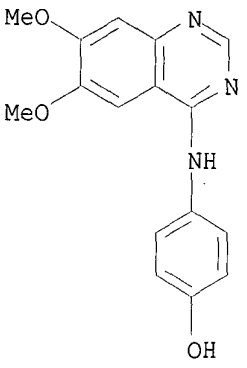


● HCl

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 133:266866

L9 ANSWER 20 OF 20 REGISTRY COPYRIGHT 2003 ACS
RN 188829-39-2 REGISTRY
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, monohydrochloride (9CI) (CA INDEX NAME)
MF C16 H15 N3 O3 . Cl H
CI COM
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
CRN (202475-60-3)



● HCl

4 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 136:272618

REFERENCE 2: 134:252355

REFERENCE 3: 133:266866

REFERENCE 4: 126:264049

=> d ide can l20

L20 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN 157482-36-5 REGISTRY
CN Kinase (phosphorylating), JAK3 protein (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Jak-3 Janus kinase
CN Jak3 kinase
CN JAK3 protein (tyrosine) kinase
CN JAK3 protein kinase
CN JAK3 tyrosine kinase
CN **Janus kinase 3**
CN L-JAK kinase
CN Leukocyte Janus kinase
CN Protein kinase Jak3
MF Unspecified
CI MAN
SR CA
LC STN Files: ADISNEWS, BIOSIS, CA, CAPLUS, CIN, TOXCENTER, USPAT2, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
367 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
368 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:336185

REFERENCE 2: 138:319532

REFERENCE 3: 138:315341

REFERENCE 4: 138:302535

REFERENCE 5: 138:252635

REFERENCE 6: 138:248181

REFERENCE 7: 138:238156

REFERENCE 8: 138:236404

REFERENCE 9: 138:220247

REFERENCE 10: 138:215743

=> d his

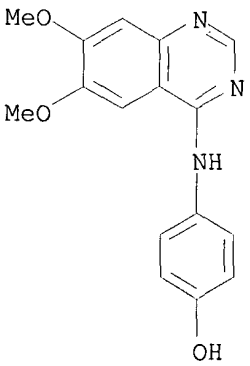
(FILE 'HOME' ENTERED AT 16:39:15 ON 11 JUN 2003)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 16:39:56 ON 11 JUN 2003
E UCKUN F/AU
L1 432 S E4-E9
L2 5 S L1 AND (CJUN OR C JUN)
L3 28 S L1 AND (JAK3 OR JAK 3)
L4 17 S L1 AND (JANUS KINASE OR JANUSKINASE)()3
L5 2 S L2 AND L3,L4

```
L6            1 S L5 AND P/DT
                SEL RN

     FILE 'REGISTRY' ENTERED AT 16:41:54 ON 11 JUN 2003
L7            6 S E1-E6
L8            2 S L7 AND 3/NR
                SEL RN
L9           20 S E7-E8/CRN

     FILE 'HCAOLD' ENTERED AT 16:43:49 ON 11 JUN 2003
L10           0 S L8 OR L9

     FILE 'USPATFULL, USPAT2' ENTERED AT 16:43:53 ON 11 JUN 2003
L11          33 S L8 OR L9
                E UCKUN F/AU
L12          31 S E4-E8 AND L11
                E WAYNE/PA
L13           0 S E21 AND L11
                E PARKER/PA,CS
L14          25 S E109,E110 AND L11
L15          33 S L11,L12,L14
L16           1 S L15 AND (PD<=19980630 OR PRD<=19980630 OR AD<-19980630)
L17          32 S L15 NOT L16

     FILE 'REGISTRY' ENTERED AT 16:47:37 ON 11 JUN 2003

     FILE 'USPATFULL, USPAT2' ENTERED AT 16:48:05 ON 11 JUN 2003

     FILE 'REGISTRY' ENTERED AT 16:51:41 ON 11 JUN 2003

     FILE 'USPATFULL, USPAT2' ENTERED AT 16:52:31 ON 11 JUN 2003
L18          31 S L17 NOT COMPUTER/TI
L19          15 S L18 AND (CJUN OR C JUN OR JAK 3 OR (JANUSKINASE OR JANUS KINA

     FILE 'REGISTRY' ENTERED AT 16:55:51 ON 11 JUN 2003
                E JANUS KINASE/CN
L20           1 S E7

     FILE 'USPATFULL, USPAT2' ENTERED AT 16:57:52 ON 11 JUN 2003
L21          38 S L20
L22          49 S (JAK3 OR JAK 3)()(KINASE OR PROTEIN KINASE OR TYROSINE KINASE
L23         107 S JAK KINASE
L24         152 S L21-L23
L25          14 S L18 AND L24
L26          15 S L19,L25
L27          15 S L26 AND L17
L28           0 S L27 AND (CJUN OR C JUN)
L29          32 S L17,L25-L27

     FILE 'REGISTRY' ENTERED AT 16:59:48 ON 11 JUN 2003

=> fil uspatall
FILE 'USPATFULL' ENTERED AT 17:00:41 ON 11 JUN 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 17:00:41 ON 11 JUN 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> d l16 bib abs hitstr

L16  ANSWER 1 OF 1  USPATFULL
AN     1998:7076  USPATFULL
TI     Aryl and heteroaryl quinazoline compounds which inhibit EGF and/or PDGF
```

receptor tyrosine kinase
IN Myers, Michael R., Reading, PA, United States
Spada, Alfred P., Lansdale, PA, United States
Maguire, Martin P., Mont Clare, PA, United States
Persons, Paul E., King of Prussia, PA, United States
PA Rhone-Poulenc Rorer Pharmaceuticals Inc., Collegeville, PA, United States (U.S. corporation)
PI US 5710158 19980120 <--
AI US 1994-229886 19940419 (8)
RLI Continuation-in-part of Ser. No. US 1993-166199, filed on 23 Dec 1993, now patented, Pat. No. US 5480883 which is a continuation-in-part of Ser. No. US 1992-988515, filed on 10 Dec 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-698420, filed on 10 May 1991, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Dees, Jose G.; Assistant Examiner: Cebulak, Mary C.
LREP Parker, III, Raymond S., Nicholson, James A., Savitzky, Martin F.
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1107
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to the modulation and/or inhibition of cell signaling, cell proliferation, cell inflammatory response, the control of abnormal cell growth and cell reproduction. More specifically, this invention relates to the use of mono- and/or bicyclic aryl or heteroaryl quinazoline compounds in inhibiting cell proliferation, including compounds which are useful protein tyrosine kinase (PTK) inhibitors. The method of treating cell proliferation using said quinazoline compounds and their use in pharmaceutical compositions is described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3**
(aryl and heteroaryl quinazoline compds. which inhibit EGF and/or PDGF receptor tyrosine kinase)
RN 202475-60-3 USPATFULL
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



=> d l29 bib abs hitrn tot

L29 ANSWER 1 OF 32 USPATFULL
AN 2003:17974 USPATFULL
TI Inhibitors of thrombin induced platelet aggregation
IN **Uckun, Fatih M.**, White Bear Lake, MN, UNITED STATES

PA **Parker Hughes Institute**, St. Paul, MN, UNITED STATES (U.S. corporation)
PI US 2003013728 A1 20030116
AI US 2002-157474 A1 20020528 (10)
RLI Continuation of Ser. No. WO 2000-US42345, filed on 29 Nov 2000, UNKNOWN
PRAI US 1999-168179P 19991130 (60)
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 727
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention describes a therapeutic method useful for treating or preventing a condition of platelet aggregation in a subject including administering a pharmaceutically effective amount of a compound or composition that inhibits **JAK-3** and/or tyrosine phosphorylation of STAT-3 and inhibits thrombin induced platelet aggregation. The condition of platelet aggregation includes hematopoietic and cerbrovascular diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3**, WHI-P 131 **211555-04-3**, WHI-P 154
(JAK-3 inhibitors and/or inhibitors of STAT-3 phosphorylation for inhibitors of thrombin-induced platelet aggregation)
IT **157482-36-5**, Jak3 kinase
(JAK-3 inhibitors and/or inhibitors of STAT-3 phosphorylation for inhibitors of thrombin-induced platelet aggregation)

L29 ANSWER 2 OF 32 USPATFULL
AN 2002:303999 USPATFULL
TI 4-(4'-hydroxyphenyl) amino-6,7-dimethoxyquinazoline to prevent development of colorectal cancer
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
PA **Parker Hughes Institute**, Roseville, MN, United States (U.S. corporation)
PI US 6482828 B1 20021119
US 2002183340 A1 20021205
AI US 2002-145639 20020514 (10)
RLI Continuation of Ser. No. WO 2000-US31188, filed on 14 Nov 2000
PRAI US 1999-165499P 19991115 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Henley, III, Raymond
LREP Merchant & Gould P.C.
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 559
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a method of preventing the development or recurrence of colorectal cancer in a mammal comprising administering to the mammal, an effective cancer preventative amount of 4-(4'-hydroxyphenyl)-amino-6,7-dimethoxyquinazoline or a pharmaceutically acceptable salt thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **340176-69-4P 340176-70-7P 340176-72-9P**
340176-73-0P 340176-74-1P 340176-75-2P
340176-76-3P 340176-77-4P 340176-78-5P
340176-79-6P 340176-80-9P 340176-81-0P
340176-82-1P 340176-83-2P 340176-84-3P

340176-85-4P
(prepn. and pharmaceutical use of 4-(4'-hydroxyphenyl)amino-6,7-dimethoxyquinazoline and its salts to prevent the development of colorectal cancer)
IT **202475-60-3P**, 4-(4'-Hydroxyphenyl)amino-6,7-dimethoxyquinazoline
(prepn. and pharmaceutical use of 4-(4'-hydroxyphenyl)amino-6,7-dimethoxyquinazoline to prevent the development of colorectal cancer)

L29 ANSWER 3 OF 32 USPATFULL
AN 2002:295196 USPATFULL
TI **JAK-3** inhibitors for treating allergic disorders
IN **Uckun, Fatih M.**, White Bear Lake, MN, UNITED STATES
Malaviya, Ravi, Shoreview, MN, UNITED STATES
Sudbeck, Elise A., St. Paul, MN, UNITED STATES
PA **Parker Hughes Institute**, St. Paul, MN, UNITED STATES (U.S. corporation)
PI US 2002165243 A1 20021107
AI US 2002-128683 A1 20020423 (10)
RLI Continuation of Ser. No. US 2001-791040, filed on 22 Feb 2001, PENDING Continuation of Ser. No. US 2000-627342, filed on 28 Jul 2000, GRANTED, Pat. No. US 6313130 Continuation of Ser. No. US 1999-443847, filed on 19 Nov 1999, GRANTED, Pat. No. US 6177433 Continuation of Ser. No. US 1999-263420, filed on 5 Mar 1999, GRANTED, Pat. No. US 6080747
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN 23 Drawing Page(s)
LN.CNT 2149
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Inhibitors of **JAK3 kinase** for the treatment of allergy, and others are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P**, WHI-P131
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **211555-04-3P**, WHI-P154
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **157482-36-5**, JAK3 kinase
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)

L29 ANSWER 4 OF 32 USPATFULL
AN 2002:288354 USPATFULL
TI Quinazolines for treating brain tumor
IN **Uckun, Fatih M.**, White Bear Lake, MN, UNITED STATES
Narla, Rama Krishna, St. Paul, MN, UNITED STATES
Liu, Xing-Ping, Minneapolis, MN, UNITED STATES
PA **Parker Hughes Institute**, Roseville, MN, UNITED STATES, 2665 (U.S. corporation)
PI US 2002161226 A1 20021031
US 6552027 B2 20030422
AI US 2001-903294 A1 20010711 (9)
RLI Continuation of Ser. No. US 1999-361088, filed on 26 Jul 1999, UNKNOWN
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903

CLMN Number of Claims: 47
ECL Exemplary Claim: 1
DRWN 16 Drawing Page(s)
LN.CNT 1714
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel substituted quinozaline compounds and conjugates useful to inhibit the growth of brain tumor cells and to inhibit adhesion and migration of brain tumor cells. The compounds of the invention include 4-(3'-bromo-4'-hydroxy phenyl)-amino-6,7-dimethoxyquinazoline and this compound covalently bound to EGF.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **211555-04-3DP**, WHI-P154, EGF conjugates
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
IT **202475-60-3P**, WHI-P131 **211555-04-3P**, WHI-P154
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
IT **202475-60-3D**, WHI-P131, EGF conjugates
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

L29 ANSWER 5 OF 32 USPATFULL
AN 2002:251804 USPATFULL
TI Quinazolines and therapeutic use thereof
IN **Uckun, Fatih M.**, White Bear Lake, MN, UNITED STATES
Liu, Xing-Ping, Minneapolis, MN, UNITED STATES
Narla, Rama Krishna, St. Paul, MN, UNITED STATES
PA **Parker Hughes Institute**, Roseville, MN, UNITED STATES (U.S. corporation)
PI US 2002137757 A1 20020926
AI US 2001-923903 A1 20010807 (9)
RLI Continuation of Ser. No. US 2001-779809, filed on 8 Feb 2001, PENDING
Continuation of Ser. No. US 1999-357404, filed on 20 Jul 1999, GRANTED, Pat. No. US 6258820
PRAI US 1999-125338P 19990319 (60)
US 1999-125145P 19990319 (60)
US 1999-125177P 19990319 (60)
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 1903
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Quinazoline compounds and methods for the treatment of cancer and for the treatment of allergic reactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **188829-39-2P 202475-60-3P 211555-04-3P 296234-84-9P**
(prepn. of quinazolines as antitumor agents)

L29 ANSWER 6 OF 32 USPATFULL
AN 2002:206662 USPATFULL
TI Quinazoline formulations and therapeutic use thereof
IN Yiv, Seang H., Encinitas, CA, UNITED STATES
Li, Mingshu, St. Paul, MN, UNITED STATES
Uckun, Fatih M., White Bear Lake, MN, UNITED STATES
PA **PARKER HUGHES INSTITUTE** (U.S. corporation)
PI US 2002111360 A1 20020815
AI US 2001-960464 A1 20010919 (9)

RLI Continuation of Ser. No. WO 2000-US7066, filed on 17 Mar 2000, UNKNOWN
PRAI US 1999-125147P 19990319 (60)
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 65
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 2297
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Pharmaceutical compositions for parenteral administration of poorly soluble quinazoline compounds in the form of microemulsions or micellar solutions are described. The compositions are useful in treating patients suffering from cancer or having allergic reactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P**
(prepn. of quinazolines for micellar pharmaceuticals for treatment of allergy and cancer)
IT **211555-04-3P**
(prepn. of quinazolines for micellar pharmaceuticals for treatment of allergy and cancer)

L29 ANSWER 7 OF 32 USPATFULL
AN 2002:106305 USPATFULL
TI **JAK-3** inhibitors for treating allergic disorders
IN **Uckun, Fatih M.**, White Bear Lake, MN, UNITED STATES
Malaviya, Ravi, Shoreview, MN, UNITED STATES
Sudbeck, Elise A., St. Paul, MN, UNITED STATES
PA **Parker Hughes Institute**, Roseville, MN, UNITED STATES (U.S. corporation)
PI US 2002055514 A1 20020509
US 6452005 B2 20020917
AI US 2001-791040 A1 20010222 (9)
RLI Continuation of Ser. No. US 2000-627342, filed on 28 Jul 2000, PENDING Continuation of Ser. No. US 1999-443847, filed on 19 Nov 1999, GRANTED, Pat. No. US 6177433 Continuation of Ser. No. US 1999-263420, filed on 5 Mar 1999, GRANTED, Pat. No. US 6080747
DT Utility
FS APPLICATION
LREP Attention Brian C. Whipps, MERCHANT & GOULD P.C., P.O. Box 2903, Minneapolis, MN, 55402-0903
CLMN Number of Claims: 28
ECL Exemplary Claim: 1
DRWN 23 Drawing Page(s)
LN.CNT 2173
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Inhibitors of **JAK3 kinase** for the treatment of allergy inhibit mast cell degranulation an dmediator release.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P**, WHI-P131
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **211555-04-3P**, WHI-P154
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **157482-36-5**, JAK3 kinase
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)

L29 ANSWER 8 OF 32 USPATFULL
AN 2002:99484 USPATFULL
TI Estrogens for treating ALS
IN **Uckun, Fatih M.**, White Bear Lake, MN, UNITED STATES
Trieu, Vuoung N., Roseville, MN, UNITED STATES
Liu, Xing-Ping, Minneapolis, MN, UNITED STATES
PA **Parker Hughes Institute**, St. Paul, MN (U.S. corporation)
PI US 2002052385 A1 20020502
AI US 2001-7967 A1 20011102 (10)
RLI Continuation of Ser. No. US 1999-455846, filed on 7 Dec 1999, PATENTED
DT Utility
FS APPLICATION
LREP Attention of Kevin C. Harrison, MERCHANT & GOULD P.C., P.O. Box 2903, Minneapolis, MN, 55402-0903
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 561
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for preventing and treating ALS by administering a phytoestrogen, preferably genistein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3**, 4-(4'-Hydroxyphenyl)amino-6,7-dimethoxyquinazoline
(phytoestrogens for treating amyotrophic lateral sclerosis)

L29 ANSWER 9 OF 32 USPATFULL
AN 2002:78855 USPATFULL
TI Therapeutic compounds
IN **Uckun, Fatih M.**, White Bear Lake, MN, UNITED STATES
Sudbeck, Elise A., St. Paul, MN, UNITED STATES
Cetkovic, Marina, Maplewood, MN, UNITED STATES
Malaviya, Ravi, Shoreview, MN, UNITED STATES
Liu, Xing-Ping, Minneapolis, MN, UNITED STATES
PA **Parker Hughes Institute**, St. Paul, MN (U.S. corporation)
PI US 2002042513 A1 20020411
US 6469013 B2 20021022
AI US 2001-858824 A1 20010516 (9)
RLI Division of Ser. No. US 2000-688756, filed on 16 Oct 2000, PENDING
Division of Ser. No. US 1999-378093, filed on 20 Aug 1999, GRANTED, Pat. No. US 6313129
PRAI US 1998-97365P 19980821 (60)
US 1998-97359P 19980821 (60)
DT Utility
FS APPLICATION
LREP Denise M Kettelberger Ph D, P O BOX 2903, Minneapolis, MN, 55402-0903
CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN 55 Drawing Page(s)
LN.CNT 2453
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides novel **JAK-3** inhibitors that are useful for treating leukemia and lymphoma. The compounds are also useful to treat or prevent skin cancer, as well as sunburn and UVB-induced skin inflammation. In addition, the compounds of the present invention prevent the immunosuppressive effects of UVB radiation, and are useful to treat or prevent autoimmune diseases, inflammation, and transplant rejection. The invention also provides pharmaceutical compositions comprising compounds of the invention, as well as therapeutic methods for their use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **211555-04-3P**, WHI-P154
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)
IT **202475-60-3P**, WHI-P131
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)
IT **157482-36-5**, Jak3 kinase
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)

L29 ANSWER 10 OF 32 USPATFULL
AN 2002:911 USPATFULL
TI Estrogens for treating ALS
IN **Uckun, Faith M.**, White Bear Lake, MN, United States
Trieu, Vuoung N., Roseville, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
PA **Parker Hughes Institute**, St. Paul, MN, United States (U.S. corporation)
PI US 6334998 B1 20020101
AI US 1999-455846 19991207 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jones, Dameron L.
LREP Merchant & Gould P.C.
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 678
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for preventing and treating ALS by administering a phytoestrogen, preferably genistein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3**, 4-(4'-Hydroxyphenyl)amino-6,7-dimethoxyquinazoline
(phytoestrogens for treating amyotrophic lateral sclerosis)

L29 ANSWER 11 OF 32 USPATFULL
AN 2001:229676 USPATFULL
TI Lipid lowering quinazoline dietary supplement composition
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Trieu, Vuong N., Roseville, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
PA Hughes Institute, St. Paul, MN, United States (U.S. corporation)
PI US 2001051629 A1 20011213
US 6410545 B2 20020625
AI US 2001-892047 A1 20010626 (9)
RLI Continuation of Ser. No. US 2001-754483, filed on 4 Jan 2001, PENDING
Continuation of Ser. No. US 1998-126940, filed on 30 Jul 1998, GRANTED, Pat. No. US 6172071
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 736
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel carbonyl-substituted quinazoline, preferably 4-(3'-bromobenzoyl)-6,7-dimethoxyquinazoline (WHI-P164), and methods for lowering blood cholesterol, including reducing total cholesterol and LDL-cholesterol levels by administration of the carbonyl quinazolines and compositions thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P 211555-04-3P**
(prepn. of lipid-lowering quinazoline derivs.)

L29 ANSWER 12 OF 32 USPATFULL
AN 2001:221051 USPATFULL
TI **JAK-3** inhibitors for treating allergic disorders
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Malavia, Ravi, Shoreview, MN, United States
Sudbeck, Elise A., St. Paul, MN, United States
PA **Parker Hughes Institute**, Roseville, MN, United States (U.S. corporation)
PI US 6326373 B1 20011204
AI US 2000-688755 20001016 (9)
RLI Continuation of Ser. No. US 2000-627342, filed on 28 Jul 2000 Continuation of Ser. No. US 1999-443847, filed on 19 Nov 1999, now patented, Pat. No. US 6177433 Continuation of Ser. No. US 1999-263420, filed on 5 Mar 1999, now patented, Pat. No. US 6080747
DT Utility
FS GRANTED
EXNAM Primary Examiner: Reamer, James H.
LREP Merchant & Gould, PC
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 54 Drawing Figure(s); 23 Drawing Page(s)
LN.CNT 2339
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Inhibitors of **JAK3 kinase** for the treatment of allergy inhibit mast cell degranulation an dmediator release.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P**, WHI-P131
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **211555-04-3P**, WHI-P154
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **157482-36-5**, JAK3 kinase
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)

L29 ANSWER 13 OF 32 USPATFULL
AN 2001:212446 USPATFULL
TI Dimethoxy quinazolines for treating diabetes
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Sudbeck, Elise A., St. Paul, MN, United States
Cetkovic, Marina, Maplewood, MN, United States
Malaviya, Ravi, Shoreview, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
PA **Parker Hughes Institute**, Roseville, MN, United States (U.S. corporation)
PI US 2001044442 A1 20011122
US 6495556 B2 20021217
AI US 2001-812098 A1 20010319 (9)
RLI Continuation of Ser. No. US 1999-378093, filed on 20 Aug 1999, PENDING
PRAI US 1998-97365P 19980821 (60)
US 1998-97359P 19980821 (60)
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN 55 Drawing Page(s)

LN.CNT 2449
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides novel **JAK-3** inhibitors that are useful for treating leukemia and lymphoma. The compounds are also useful to treat or prevent skin cancer, as well as sunburn and UVB-induced skin inflammation. In addition, the compounds of the present invention prevent the immunosuppressive effects of UVB radiation, and are useful to treat or prevent autoimmune diseases, inflammation, and transplant rejection. The invention also provides pharmaceutical compositions comprising compounds of the invention, as well as therapeutic methods for their use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **211555-04-3P**, WHI-P154
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)
IT **202475-60-3P**, WHI-P131
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)
IT **157482-36-5**, Jak3 kinase
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)

L29 ANSWER 14 OF 32 USPATFULL
AN 2001:202636 USPATFULL
TI 6,7-Dimethoxy-4-anilinoquinazolines
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Narla, Rama Krishna, St. Paul, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
PA **Parker Hughes Institute**, Roseville, MN, United States (U.S. corporation)
PI US 6316454 B1 20011113
AI US 1999-361088 19990726 (9)
RLI Continuation of Ser. No. US 1998-87479, filed on 28 May 1998
DT Utility
FS GRANTED
EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: McKenzie, Thomas
LREP Merchant & Gould, P.C.
CLMN Number of Claims: 15
ECL Exemplary Claim: 6
DRWN 23 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 1668
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB 6,7-Dimethoxy-4-anilinoquinaozolines of the formula: ##STR1##

or pharmaceutically acceptable acid addition salts thereof are disclosed. These novel compounds are useful for inducing apoptosis and preventing metastases of brain tumor cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **211555-04-3DP**, WHI-P154, EGF conjugates
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
IT **202475-60-3P**, WHI-P131 **211555-04-3P**, WHI-P154
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
IT **202475-60-3D**, WHI-P131, EGF conjugates
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

L29 ANSWER 15 OF 32 USPATFULL
AN 2001:197027 USPATFULL
TI **JAK-3** inhibitors for treating allergic disorders
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Malaviya, Ravi, Shoreview, MN, United States
Sudbeck, Elise A., St. Paul, MN, United States

PA **Parker Hughes Institute**, Roseville, MN, United States (U.S. corporation)
PI US 6313130 B1 20011106
AI US 2000-627342 20000728 (9)
RLI Continuation of Ser. No. US 1999-443847, filed on 19 Nov 1999, now patented, Pat. No. US 6177433 Continuation of Ser. No. US 1999-263420, filed on 5 Mar 1999, now patented, Pat. No. US 6080747
DT Utility
FS GRANTED
EXNAM Primary Examiner: Reamer, James H.
LREP Merchant & Gould P.C.
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN 54 Drawing Figure(s); 23 Drawing Page(s)
LN.CNT 2363
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Inhibitors of **JAK3 kinase** for the treatment of allergy inhibit mast cell degranulation an dmediator release.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P**, WHI-P131
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **211555-04-3P**, WHI-P154
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **157482-36-5**, JAK3 kinase
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)

L29 ANSWER 16 OF 32 USPATFULL
AN 2001:197026 USPATFULL
TI Therapeutic compounds
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Sudbeck, Elise A., St. Paul, MN, United States
Cetkovic, Marina, Maplewood, MN, United States
Malaviya, Ravi, Shoreview, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
PA Hughes Institute, St, Paul, MN, United States (U.S. corporation)
PI US 6313129 B1 20011106
AI US 1999-378093 19990820 (9)
PRAI US 1998-97365P 19980821 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Ford, John M.; Assistant Examiner: Liu, Hong
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 42 Drawing Figure(s); 55 Drawing Page(s)
LN.CNT 2707
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides novel **JAK-3** inhibitors that are useful for treating leukemia and lymphoma. The compounds are also useful to treat or prevent skin cancer, as well as sunburn and UVB-induced skin inflammation. In addition, the compounds of the present invention prevent the immunosuppressive effects of UVB radiation, and are useful to treat or prevent autoimmune diseases, inflammation, and transplant rejection. The invention also provides pharmaceutical compositions comprising compounds of the invention, as well as therapeutic methods for their use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **211555-04-3P**, WHI-P154
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)
IT **202475-60-3P**, WHI-P131
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)
IT **157482-36-5**, Jak3 kinase
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)

L29 ANSWER 17 OF 32 USPATFULL
AN 2001:139546 USPATFULL
TI Quinazolines and therapeutic use thereof
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
Narla, Rama Krishna, St. Paul, MN, United States
PA Hughes Institute, Roseville, MN, United States, 55113 (U.S. corporation)
PI US 2001016588 A1 20010823
US 6358962 B2 20020319
AI US 2001-779809 A1 20010208 (9)
RLI Continuation of Ser. No. US 1999-357404, filed on 20 Jul 1999, PENDING
PRAI US 1999-125338P 19990319 (60)
US 1999-125145P 19990319 (60)
US 1999-125177P 19990319 (60)
DT Utility
FS APPLICATION
LREP Attention: Brian C. Whipps, MERCHANT & GOULD P.C., P.O. Box 2903, Minneapolis, MN, 55402-0903
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 18 Drawing Page(s)
LN.CNT 1920
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Quinazoline compounds and methods for the treatment of cancer and for the treatment of allergic reactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **188829-39-2P 202475-60-3P 211555-04-3P**
296234-84-9P
(prepn. of quinazolines as antitumor agents)

L29 ANSWER 18 OF 32 USPATFULL
AN 2001:114629 USPATFULL
TI Lipid-lowering quinazoline derivative
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Trieu, Vuong N., Roseville, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
PA Hughes Institute, St. Paul, MN, United States, 55113 (U.S. corporation)
PI US 2001008894 A1 20010719
US 6355645 B2 20020312
AI US 2001-756483 A1 20010312 (9)
RLI Continuation of Ser. No. US 1998-126940, filed on 30 Jul 1998, GRANTED, Pat. No. US 6172071
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD, P O BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 739
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel carbonyl-substituted quinazoline, preferably 4-(3'-bromobenzoyl)-6,7-dimethoxyquinazoline (WHI-P164), and methods for lowering blood cholesterol, including reducing total cholesterol and LDL-cholesterol levels by administration of the carbonyl quinazolines

and compositions thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P 211555-04-3P**
(prepn. of lipid-lowering quinazoline derivs.)

L29 ANSWER 19 OF 32 USPATFULL
AN 2001:107902 USPATFULL
TI Synthesis and anti-tumor activity of 6,7-dialkoxy-4-phenylamino-quinazolines
IN **Uckun, Faith M.**, White Bear Lake, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
Narla, Rama Krishna, St. Paul, MN, United States
PA **Parker Hughes Institute**, Roseville, MN, United States (U.S. corporation)
PI US 6258820 B1 20010710
AI US 1999-357404 19990720 (9)
PRAI US 1999-125338P 19990319 (60)
US 1999-125145P 19990319 (60)
US 1999-125177P 19990319 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: McKenzie, Thomas
LREP Merchant & Gould P.C.
CLMN Number of Claims: 36
ECL Exemplary Claim: 1
DRWN 42 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 2044
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compounds of the formula: ##STR1##

wherein:

R.sup.a is iodo, (C.sub.1 -C.sub.4)hydroxyalkyl, benzyloxy, OCF.sub.3, SCF.sub.3, SO.sub.3 H, SO.sub.2 F, SO.sub.2 NR.sup.2 R.sup.3 where R.sup.2 is hydrogen or (C.sub.1 -C.sub.4)alkyl and R.sup.3 is hydrogen, (C.sub.1 -C.sub.4)alkyl, or phenyl, NR.sup.2 R.sup.4 where R.sup.2 is hydrogen or (C.sub.1 -C.sub.4)alkyl and R.sup.4 is phenyl; or a group of the formula ##STR2##

wherein R.sup.5 and R.sup.6 are each independently, hydrogen, (C.sub.1 -C.sub.4)alkyl, or (C.sub.1 -C.sub.4) perfluoroalkyl, and R.sup.7 is hydrogen, halo, hydroxy, (C.sub.1 -C.sub.4)alkyl, (C.sub.1 -C.sub.4)alkoxy, (C.sub.1 -C.sub.4)hydroxyalkyl, or N(R.sup.2).sub.2, where R.sup.2 is hydrogen or (C.sub.1 -C.sub.4)alkyl;

n is an integer of 1-4;

R.sup.b is each, independently, hydrogen, halo, hydroxy, mercapto, (C.sub.1 -C.sub.4)alkyl, (C.sub.1 -C.sub.4)alkoxy, (C.sub.1 -C.sub.4)thioalkyl, (C.sub.1 -C.sub.4)hydroxyalkyl, nitro, cyano, methylenedioxy, ethylenedioxy, COCH.sub.3, CF.sub.3, OCF.sub.3, SCF.sub.3, COOH, SO.sub.3 H, SO.sub.2 F, phenyl, or phenyl substituted by a group selected from halo, hydroxy, mercapto, (C.sub.1 -C.sub.4)alkyl, (C.sub.1 -C.sub.4) alkoxy, (C.sub.1 -C.sub.4)thioalkyl, (C.sub.1 -C.sub.4)hydroxyalkyl, amino, nitro, cyano, CF.sub.3, COOH, SO.sub.3 H, SO.sub.2 NR.sup.2 R.sup.3, SO.sub.2 F where R.sup.2 is H or (C.sub.1 -C.sub.4)alkyl and R.sup.3 is H, (C.sub.1 -C.sub.4)alkyl, phenyl, or phenyl substituted by a group as defined above; benzyloxy or benzyloxy substituted on the phenyl portion by a group defined above; NR.sup.2 R.sup.3 where R.sup.2 is H or (C.sub.1 -C.sub.4)alkyl and R.sup.3 is H, (C.sub.1 -C.sub.4)alkyl, phenyl, or phenyl substituted by a group as defined above; and

R.sup.1 is (C.sub.1 -C.sub.4)alkyl or a pharmaceutically acceptable salt thereof; and methods for the treatment of cancer and for the treatment of allergic reactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **188829-39-2P 202475-60-3P 211555-04-3P**
296234-84-9P
(prepn. of quinazolines as antitumor agents)

L29 ANSWER 20 OF 32 USPATFULL
AN 2001:105515 USPATFULL
TI Power supply unit and computer
IN Odaohhara, Shigefumi, Yamato-shi, Japan
PI US 2001007134 A1 20010705
AI US 2001-754483 A1 20010104 (9)
PRAI JP 2000-424 20000105
DT Utility
FS APPLICATION
LREP FELSMAN, BRADLEY, VADEN,, GUNTER & DILLON, LLP, Suite 350, Lakewood on the Park, 7600B North Capital of Texas Highway, Austin, TX, 78731
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 889
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A series power supply circuit and a switching power supply circuit are combined within a single power supply unit. The switching power supply circuit provides an efficiency lower than that of the series power supply circuit under a light load and provides an efficiency higher than that of the series power supply circuit under a heavy load. A standby signal that is asserted under a light load and is deasserted under a heavy load is input to a negative logic enable terminal (-EN) of the series power supply circuit through an inverter0. The standbysignal is directly input to the negative logic enable terminal (-EN) of a PWM controller in the switching power supply circuit.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P 211555-04-3P**
(prepn. of lipid-lowering quinazoline derivs.)

L29 ANSWER 21 OF 32 USPATFULL
AN 2001:10895 USPATFULL
TI **JAK-3** inhibitors for treating allergic disorders
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Malavia, Ravi, Shoreview, MN, United States
Sudbeck, Elise A., St. Paul, MN, United States
PA **Parker Hughes Institute**, Roseville, MN, United States (U.S. corporation)
PI US 6177433 B1 20010123
AI US 1999-443847 19991119 (9)
RLI Continuation of Ser. No. US 1999-263420, filed on 5 Mar 1999
DT Utility
FS Granted
EXNAM Primary Examiner: Reamer, James H.
LREP Merchant & Gould P.C.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1,11
DRWN 53 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 2356
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Inhibitors of **JAK3 kinase** for the treatment of allergy inhibit mast cell degranulation an dmediator release.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P**, WHI-P131
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **211555-04-3P**, WHI-P154
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **157482-36-5**, JAK3 kinase
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)

L29 ANSWER 22 OF 32 USPATFULL
AN 2001:4745 USPATFULL
TI Lipid-lowering quinazoline derivative
IN **Uckun, Faith M.**, White Bear Lake, MN, United States
Trieu, Vuong N., Roseville, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
PA Hughes Institute, St. Paul, MN, United States (U.S. corporation)
PI US 6172071 B1 20010109
AI US 1998-126940 19980730 (9)
DT Patent
FS Granted
EXNAM Primary Examiner: Ford, John M.
LREP Merchant & Gould P.C.
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN 6 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 753
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel carbonyl-substituted quinazoline, preferably 4-(3'-bromobenzoyl)-6,7-dimethoxyquinazoline (WHI-P164), and methods for lowering blood cholesterol, including reducing total cholesterol and LDL-cholesterol levels by administration of the carbonyl quinazolines and compositions thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P 211555-04-3P**
(prepn. of lipid-lowering quinazoline derivs.)

L29 ANSWER 23 OF 32 USPATFULL
AN 2000:80756 USPATFULL
TI Therapeutic use of **JAK-3** inhibitors
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Malavia, Ravi, Shoreview, MN, United States
Sudbeck, Elise A., St. Paul, MN, United States
PA **Parker Hughes Institute**, Roseville, MN, United States (U.S. corporation)
PI US 6080748 20000627
AI US 1999-361491 19990726 (9)
RLI Continuation of Ser. No. US 1999-263420, filed on 5 Mar 1999
DT Utility
FS Granted
EXNAM Primary Examiner: Reamer, James H.
LREP Merchant & Gould P.C.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 15 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 2357
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Inhibitors of **JAK3 kinase** for the treatment of allergy inhibit mast cell degranulation an dmediator release.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P**, WHI-P131
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **211555-04-3P**, WHI-P154
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **157482-36-5**, JAK3 kinase
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)

L29 ANSWER 24 OF 32 USPATFULL
AN 2000:80755 USPATFULL
TI **JAK-3** inhibitors for treating allergic disorders
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Malavia, Ravi, Shoreview, MN, United States
Sudbeck, Elise A., St. Paul, MN, United States
PA Hughes Institute, Roseville, MN, United States (U.S. corporation)
PI US 6080747 20000627
AI US 1999-263420 19990305 (9)
DT Utility
FS Granted
EXNAM Primary Examiner: Reamer, James H.
LREP Merchant & Gould P.C.
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN 53 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 2348
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Inhibitors of **JAK3 kinase** for the treatment of allergy inhibit mast cell degranulation an dmediator release.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P**, WHI-P131
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **211555-04-3P**, WHI-P154
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **157482-36-5**, JAK3 kinase
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)

L29 ANSWER 25 OF 32 USPAT2
AN 2002:303999 USPAT2
TI 4-(4'-HYDROXYPHENYL) AMINO-6,7-DIMETHOXYQUINAZOLINE TO PREVENT DEVELOPMENT OF COLORECTAL CANCER
IN **Uckun, Fatih M.**, White Bear Lake, MN, UNITED STATES
PA **Parker Hughes Institute**, St. Paul, MN (U.S. corporation)
PI US 2002183340 A1 20021205
AI US 2002-145639 A1 20020514 (10)
RLI Continuation of Ser. No. WO 2000-US31188, filed on 14 Nov 2000, UNKNOWN
PRAI US 1999-165499P 19991115 (60)
DT Utility

FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 559
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to a method of preventing the development or recurrence of colorectal cancer in a mammal comprising adminstering to the mammal an effective cancer preventive amount of 4(4'-hydroxyphenyl)-amino-6,7-dimethoxyquinazoline or a pharmaceutically acceptable salt thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **340176-69-4P 340176-70-7P 340176-72-9P**
340176-73-0P 340176-74-1P 340176-75-2P
340176-76-3P 340176-77-4P 340176-78-5P
340176-79-6P 340176-80-9P 340176-81-0P
340176-82-1P 340176-83-2P 340176-84-3P
340176-85-4P
(prepn. and pharmaceutical use of 4-(4'-hydroxyphenyl)amino-6,7-dimethoxyquinazoline and its salts to prevent the development of colorectal cancer)
IT **202475-60-3P**, 4-(4'-Hydroxyphenyl)amino-6,7-dimethoxyquinazoline
(prepn. and pharmaceutical use of 4-(4'-hydroxyphenyl)amino-6,7-dimethoxyquinazoline to prevent the development of colorectal cancer)

L29 ANSWER 26 OF 32 USPAT2
AN 2002:288354 USPAT2
TI Quinazolines for treating brain tumor
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Narla, Rama Krishna, St. Paul, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
PA **Parker Hughes Institute**, Roseville, MN, United States (U.S. corporation)
PI US 6552027 B2 20030422
AI US 2001-903294 20010711 (9)
RLI Continuation of Ser. No. US 1999-361088, filed on 26 Jul 1999, now patented, Pat. No. US 6316454 Continuation of Ser. No. US 1998-87479, filed on 28 May 1998, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: McKenzie, Thomas
LREP Merchant & Gould P.C.
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 23 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 1629
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel substituted quinozaline compounds and conjugates useful to inhibit the growth of brain tumor cells and to inhibit adhesion and migration of brain tumor cells. The compounds of the invention include 4-(3'-bromo-4'-hydroxy phenyl)-amino-6,7-dimethoxyquinazoline and this compound covalently bound to EGF.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **211555-04-3DP**, WHI-P154, EGF conjugates
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
IT **202475-60-3P**, WHI-P131 **211555-04-3P**, WHI-P154
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
IT **202475-60-3D**, WHI-P131, EGF conjugates

(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

L29 ANSWER 27 OF 32 USPAT2
AN 2002:106305 USPAT2
TI **JAK-3** inhibitors for treating allergic disorders
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Malaviya, Ravi, Shoreview, MN, United States
Sudbeck, Elise A., St. Paul, MN, United States
PA **Parker Hughes Institute**, Roseville, MN, United States (U.S. corporation)
PI US 6452005 B2 20020917
AI US 2001-791040 20010222 (9)
RLI Continuation of Ser. No. US 2000-627342, filed on 28 Jul 2000 Continuation of Ser. No. US 1999-443847, filed on 19 Nov 1999, now patented, Pat. No. US 6177433 Continuation of Ser. No. US 1999-263420, filed on 5 Mar 1999, now patented, Pat. No. US 6080747
DT Utility
FS GRANTED
EXNAM Primary Examiner: Raymond, Richard L.; Assistant Examiner: Truong, Tamthom N.
LREP Merchant & Gould P.C.
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 54 Drawing Figure(s); 23 Drawing Page(s)
LN.CNT 2332
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Inhibitors of **JAK3 kinase** for the treatment of allergy inhibit mast cell degranulation an dmediator release.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P**, WHI-P131
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **211555-04-3P**, WHI-P154
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)
IT **157482-36-5**, JAK3 kinase
(prepn. of quinazoline derivs. as JAK-3 inhibitors for treating allergic disorders in relation to inhibition of mast cell degranulation and pharmacokinetics and toxicity)

L29 ANSWER 28 OF 32 USPAT2
AN 2002:78855 USPAT2
TI Therapeutic compounds
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Sudbeck, Elise A., St. Paul, MN, United States
Cetkovic, Marina, Maplewood, MN, United States
Malaviya, Ravi, Shoreview, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
PA **Parker Hughes Institute**, St. Paul, MN, United States (U.S. corporation)
PI US 6469013 B2 20021022
AI US 2001-858824 20010516 (9)
RLI Division of Ser. No. US 2000-688756, filed on 16 Oct 2000 Division of Ser. No. US 1999-378093, filed on 20 Aug 1999, now patented, Pat. No. US 6313129
PRAI US 1998-97365P 19980821 (60)
US 1998-97359P 19980821 (60)
DT Utility
FS GRANTED

EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: Liu, Hong
LREP Merchant & Gould P.C.
CLMN Number of Claims: 3
ECL Exemplary Claim: 1
DRWN 70 Drawing Figure(s); 55 Drawing Page(s)
LN.CNT 2653
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides novel **JAK-3** inhibitors that are useful for treating leukemia and lymphoma. The compounds are also useful to treat or prevent skin cancer, as well as sunburn and UVB-induced skin inflammation. In addition, the compounds of the present invention prevent the immunosuppressive effects of UVB radiation, and are useful to treat or prevent autoimmune diseases, inflammation, and transplant rejection. The invention also provides pharmaceutical compositions comprising compounds of the invention, as well as therapeutic methods for their use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **211555-04-3P**, WHI-P154
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)
IT **202475-60-3P**, WHI-P131
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)
IT **157482-36-5**, Jak3 kinase
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)

L29 ANSWER 29 OF 32 USPAT2
AN 2001:229676 USPAT2
TI Lipid lowering quinazoline dietary supplement composition
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Trieu, Vuong N., Roseville, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
PA **Parker Hughes Institute**, St. Paul, MN, United States (U.S. corporation)
PI US 6410545 B2 20020625
AI US 2001-892047 20010626 (9)
RLI Continuation of Ser. No. US 2001-756483, filed on 8 Jan 2001, now patented, Pat. No. US 6355645 Continuation of Ser. No. US 1998-126940, filed on 30 Jul 1998, now patented, Pat. No. US 6172071
DT Utility
FS GRANTED
EXNAM Primary Examiner: Criares, Theodore J.
LREP Merchant & Gould P.C.
CLMN Number of Claims: 3
ECL Exemplary Claim: 1
DRWN 12 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 727
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel carbonyl-substituted quinazoline, preferably 4-(3'-bromobenzoyl)-6,7-dimethoxyquinazoline (WHI-P164), and methods for lowering blood cholesterol, including reducing total cholesterol and LDL-cholesterol levels by administration of the carbonyl quinazolines and compositions thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P 211555-04-3P**
(prepn. of lipid-lowering quinazoline derivs.)

L29 ANSWER 30 OF 32 USPAT2
AN 2001:212446 USPAT2
TI Dimethoxy quinazolines for treating diabetes
IN **Uckun, Fatih M.**, White Bear Leak, MN, United States
Sudbeck, Elise A., St. Paul, MN, United States
Cetkovic, Marina, Maplewood, MN, United States

Malaviya, Ravi, Shoreview, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
PA **Parker Hughes Institute**, Roseville, MN, United States (U.S. corporation)
PI US 6495556 B2 20021217
AI US 2001-812098 20010319 (9)
RLI Continuation of Ser. No. US 1999-378093, filed on 20 Aug 1999
PRAI US 1998-97365P 19980821 (60)
US 1998-97359P 19980821 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: Liu, Hong
LREP Merchant & Gould P.C.
CLMN Number of Claims: 1
ECL Exemplary Claim: 1
DRWN 70 Drawing Figure(s); 55 Drawing Page(s)
LN.CNT 2611
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides novel **JAK-3** inhibitors that are useful for treating leukemia and lymphoma. The compounds are also useful to treat or prevent skin cancer, as well as sunburn and UVB-induced skin inflammation. In addition, the compounds of the present invention prevent the immunosuppressive effects of UVB radiation, and are useful to treat or prevent autoimmune diseases, inflammation, and transplant rejection. The invention also provides pharmaceutical compositions comprising compounds of the invention, as well as therapeutic methods for their use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **211555-04-3P**, WHI-P154
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)
IT **202475-60-3P**, WHI-P131
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)
IT **157482-36-5**, Jak3 kinase
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)

L29 ANSWER 31 OF 32 USPAT2
AN 2001:139546 USPAT2
TI 6,7-Dimethoxyquinazolines and therapeutic use thereof
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
Narla, Rama Krishna, St. Paul, MN, United States
PA **Parker Hughes Institute**, St. Paul, MN, United States (U.S. corporation)
PI US 6358962 B2 20020319
AI US 2001-779809 20010208 (9)
RLI Continuation of Ser. No. US 1999-357404, filed on 20 Jul 1999, now patented, Pat. No. US 6258820
PRAI US 1999-125338P 19990319 (60)
US 1999-125145P 19990319 (60)
US 1999-125177P 19990319 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Raymond, Richard L.; Assistant Examiner: McKenzie, Thomas
LREP Merchant & Gould, P.C.
CLMN Number of Claims: 11
ECL Exemplary Claim: 6
DRWN 42 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 1803
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Quinazoline compounds and methods for the treatment of cancer and for the treatment of allergic reactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **188829-39-2P 202475-60-3P 211555-04-3P**
296234-84-9P
(prepn. of quinazolines as antitumor agents)

L29 ANSWER 32 OF 32 USPAT2
AN 2001:114629 USPAT2
TI Lipid-lowering quinazoline derivative
IN **Uckun, Fatih M.**, White Bear Lake, MN, United States
Trieu, Vuong N., Roseville, MN, United States
Liu, Xing-Ping, Minneapolis, MN, United States
PA **Parker Hughes Institute**, St. Paul, MN, United States (U.S. corporation)
PI US 6355645 B2 20020312
AI US 2001-756483 20010108 (9)
RLI Continuation of Ser. No. US 1998-126940, filed on 30 Jul 1998, now patented, Pat. No. US 6172071
DT Utility
FS GRANTED
EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: Truong, Tamthom N.
LREP Merchant & Gould, P.C.
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN 12 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 746
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel carbonyl-substituted quinazoline, preferably 4-(3'-bromobenzoyl)-6,7-dimethoxyquinazoline (WHI-P164), and methods for lowering blood cholesterol, including reducing total cholesterol and LDL-cholesterol levels by administration of the carbonyl quinazolines and compositions thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **202475-60-3P 211555-04-3P**
(prepn. of lipid-lowering quinazoline derivs.)

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FILE 'HCAPLUS' ENTERED AT 17:04:59 ON 11 JUN 2003
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FILE COVERS 1907 - 11 Jun 2003 VOL 138 ISS 24
FILE LAST UPDATED: 10 Jun 2003 (20030610/ED)

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     (FILE 'REGISTRY' ENTERED AT 16:59:48 ON 11 JUN 2003)

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     FILE 'HCAPLUS' ENTERED AT 17:01:09 ON 11 JUN 2003
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L32          44 S L30,L31
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L34           6 S L33 AND L1
L35           6 S L33 AND (HUGHES OR WAYNE OR PARKER)/PA,CS
L36           8 S L33-L35
L37           2 S L36 AND (CJUN OR C JUN)
L38           2 S L36 AND L24
L39           1 S L36 AND (JANUSKINASE OR JANUS KINASE OR JAK3)
L40           8 S L36-L39

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=> d all hitstr tot 140

L40  ANSWER 1 OF 8  HCAPLUS  COPYRIGHT 2003 ACS
AN   2000:15019  HCAPLUS
DN   132:64268
TI   Preparation of 4-anilinoquinazolines and analogs as JAK3
     inhibitors
IN   Uckun, Fatih M.
PA   Hughes Institute, USA
SO   PCT Int. Appl., 49 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  A61K031-517
     ICS  C07D243-34
CC   28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1
FAN.CNT 1
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             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
             MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
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         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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     AU 9948515         A1   20000117      AU 1999-48515    19990630 <--
     EP 1091739         A1   20010418      EP 1999-932145   19990630 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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PRAI US 1998-91150P     P    19980630  <--
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OS   MARPAT 132:64268
GI
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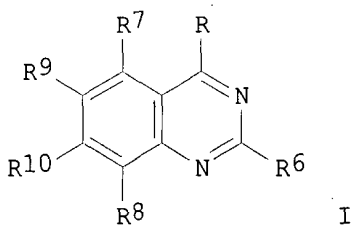


I

AB Title compds. [I; R = ZR1; R1 = (un)substituted Ph; R6-R8 = H, halo, alkyl, alkoxy, etc.; R9,R10 = H, halo, alkyl, alkoxy,alkanoyl; R9R10 = OCH2O; Z = CHR11, O, S, NR11; R11 = H, alkyl, alkanoyl] were prepd. Thus, I (R6-R8 = H, R9 = R10 = OMe)(II; R = Cl) was aminated by 4-(HO)C6H4NH2 to give II [R = NHC6H4(OH)-4]. Data for biol. activity of I were given.

ST anilinoquinazoline prepn **JAK3** inhibitor; **cjun** expression inhibitor anilinoquinazoline prepn

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**c-jun**, mediated disorders; treatment; prepn. of 4-anilinoquinazolines and analogs as **JAK3** inhibitors)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(oncogene, mediated disorders; treatment; prepn. of 4-anilinoquinazolines and analogs as **JAK3** inhibitors)

IT Antitumor agents
(prepn. of 4-anilinoquinazolines and analogs as **JAK3** inhibitors)

IT **157482-36-5**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(mediated disorders; treatment; prepn. of 4-anilinoquinazolines and analogs as **JAK3** inhibitors)

IT **202475-60-3P 211555-04-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 4-anilinoquinazolines and analogs as **JAK3** inhibitors)

IT 123-30-8, 4-Hydroxyaniline 13790-39-1, 4-Chloro-6,7-dimethoxyquinazoline 16750-67-7, 4-Amino-2-bromophenol
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of 4-anilinoquinazolines and analogs as **JAK3** inhibitors)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Goodman, P; J Biol Chem 1998, V273, P17742 HCAPLUS
(2) Leonard, W; WO 9703358 A 1997 HCAPLUS
(3) Narla, R; Clinical Cancer Research V4(6), P1405 HCAPLUS
(4) St Jude Childrens Res Hospital; WO 9503701 A 1995 HCAPLUS

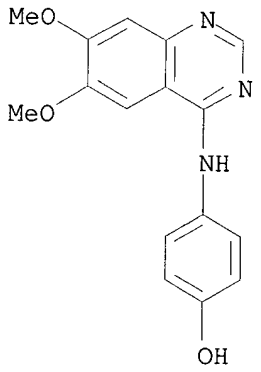
IT **157482-36-5**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(mediated disorders; treatment; prepn. of 4-anilinoquinazolines and analogs as **JAK3** inhibitors)

RN 157482-36-5 HCAPLUS

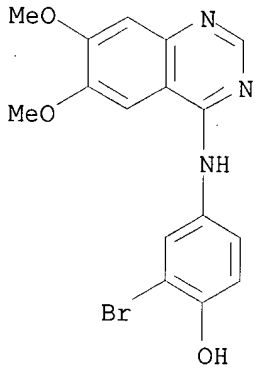
CN Kinase (phosphorylating), JAK3 protein (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **202475-60-3P 211555-04-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 4-anilinoquinazolines and analogs as **JAK3** inhibitors)
RN 202475-60-3 HCAPLUS
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



RN 211555-04-3 HCAPLUS
CN Phenol, 2-bromo-4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



L40 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:764027 HCAPLUS
DN 132:9009
TI Quinazolines and conjugates thereof for treating brain tumors
IN **Uckun, Fatih M.**; Narla, Rama K.; Liu, Xing-Ping
PA **Wayne Hughes** Institute, USA
SO PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07D239-94
ICS C07D239-88; C07D239-74; A61K031-505
CC 1-6 (Pharmacology)
Section cross-reference(s): 2, 28, 63
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 9961428 A1 19991202 WO 1999-US11767 19990528 <--
W: AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
CA 2333392 AA 19991202 CA 1999-2333392 19990528 <--
AU 9943173 A1 19991213 AU 1999-43173 19990528 <--
EP 1082311 A1 20010314 EP 1999-953336 19990528 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
JP 2002516823 T2 20020611 JP 2000-550834 19990528 <--
US 6316454 B1 20011113 US 1999-361088 19990726 <--
NO 2000005864 A 20010129 NO 2000-5864 20001120 <--
US 2002161226 A1 20021031 US 2001-903294 20010711
US 6552027 B2 20030422
PRAI US 1998-87479 A 19980529 <--
WO 1999-US11767 W 19990528
US 1999-361088 A1 19990726
OS MARPAT 132:9009
AB Substituted quinazoline compds. and conjugates useful for inhibiting the growth of brain tumor cells and for inhibiting adhesion and migration of brain tumor cells are provided. The compds. include 4-(3'-bromo-4'-hydroxyphenyl)amino-6,7-dimethoxyquinazoline and this compd. covalently bound to e.g. EGF.
ST quinazoline deriv brain cancer treatment; EGF quinazoline conjugate brain cancer treatment; adhesion brain cancer cell quinazoline deriv; migration brain cancer cell quinazoline deriv
IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antibodies to, conjugates; quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
IT Structure-activity relationship
(antitumor; quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
IT Antitumor agents
Antitumor agents
(brain; quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
IT Antibodies
Cytokines
Growth factors, animal
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates; quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
IT Neuroglia
(glioblastoma, cell adhesion; quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
IT Neuroglia
Neuroglia
(glioblastoma, inhibitors; quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
IT Antitumor agents
(glioblastoma; quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
IT Brain, neoplasm
Brain, neoplasm

(inhibitors; quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

IT Brain, neoplasm
(medulloblastoma, cell adhesion; quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

IT Antitumor agents
(metastasis; quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

IT Actins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(polymn.; quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

IT Apoptosis
Cell adhesion
Cell migration
Drug delivery systems
Drug targeting
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

IT Epidermal growth factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

IT Biological transport
(uptake; quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

IT **211555-04-3DP, WHI-P154**, EGF conjugates
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

IT 62229-50-9, Epidermal growth factor
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

IT 21561-09-1P, WHI-P 258 153436-54-5P, WHI-P 79 **202475-60-3P, WHI-P131 211555-04-3P, WHI-P154** 211555-05-4P, WHI-P 97 211555-06-5P, WHI-P 111 211555-07-6P, WHI-P 132 211555-08-7P, WHI-P180 211555-09-8P, WHI-P 197 251376-04-2P, WHI-P 292
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

IT 62229-50-9D, Epidermal growth factor, quinazoline deriv. conjugates
202475-60-3D, WHI-P131, EGF conjugates
251347-48-5 251347-49-6 251347-50-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

IT 62-53-3, Benzenamine, reactions 95-55-6, 2-Hydroxyaniline 123-30-8, 4-Hydroxyaniline 591-19-5, 3-Bromoaniline 591-27-5, 3-Hydroxyaniline 609-21-2, 3,5-Dibromo-4-hydroxyaniline 2834-92-6 3964-52-1, 3-Chloro-4-hydroxyaniline 7745-91-7, 3-Bromo-4-methylaniline 13790-39-1, 4-Chloro-6,7-dimethoxyquinazoline 16750-67-7

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

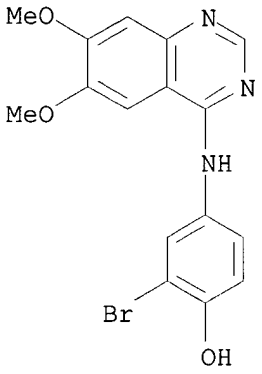
RE

(1) Narla, R; Clinical Cancer Research 1998, V4(6), P1405 HCAPLUS
(2) Rhone-Poulenc; WO 9515758 A 1995 HCAPLUS
(3) Zeneca; EP 0566226 A 1993 HCAPLUS
(4) Zeneca; WO 9615118 A 1996 HCAPLUS
(5) Zeneca; WO 9730035 A 1997 HCAPLUS
(6) Zeneca; WO 9732856 A 1997 HCAPLUS

IT **211555-04-3DP, WHI-P154,** EGF conjugates
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

RN 211555-04-3 HCAPLUS

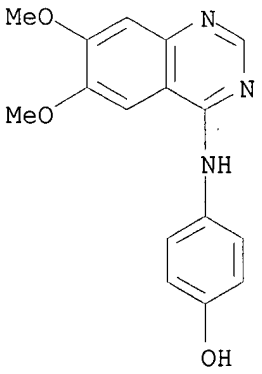
CN Phenol, 2-bromo-4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



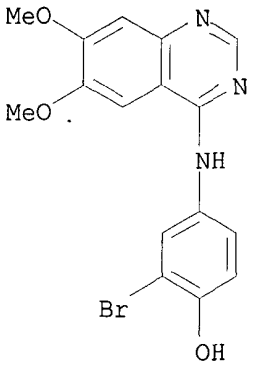
IT **202475-60-3P, WHI-P131 211555-04-3P, WHI-P154**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)

RN 202475-60-3 HCAPLUS

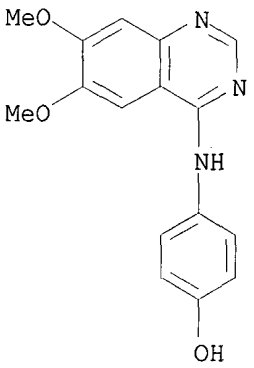
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



RN 211555-04-3 HCAPLUS
CN Phenol, 2-bromo-4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



IT **202475-60-3D, WHI-P131,** EGF conjugates
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(quinazoline derivs., prepn., conjugates, and use for treating brain tumors)
RN 202475-60-3 HCAPLUS
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



L40 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:698779 HCAPLUS
DN 130:104886
TI Inhibition of human glioblastoma cell adhesion and invasion by 4-(4'-hydroxylphenyl)-amino-6,7-dimethoxyquinazoline (**WHI-P131**) and 4-(3'-bromo-4'-hydroxylphenyl)-amino-6,7-dimethoxyquinazoline (**WHI-P154**)
AU Narla, Rama Krishna; Liu, Xing-Ping; Klis, Daniel; **Uckun, Fatih M.**
CS Drug Discovery Program, Department of Experimental Oncology, **Wayne Hughes** Institute, St. Paul, MN, 55113, USA
SO Clinical Cancer Research (**1998**), 4(10), 2463-2471
CODEN: CCREF4; ISSN: 1078-0432
PB American Association for Cancer Research
DT Journal
LA English
CC 1-6 (Pharmacology)

AB Glioblastoma multiforme is a highly invasive primary brain tumor with a disappointingly high local recurrence rate and mortality despite intensive multimodality treatment programs. Therefore, new agents that are capable of inhibiting the infiltration of normal brain parenchyma by glioblastoma cells are urgently needed. Here, we show that the novel quinazoline derivs. 4-(4'hydroxylphenyl)-amino-6,7-dimethoxyquinazoline (**WHI-P131**) and 4-(3'-bromo-4'hydroxylphenyl)-amino-6,7-dimethoxyquinazoline (**WHI-P154**) are potent inhibitors of glioblastoma cell adhesion and migration. Specifically, both compds. inhibited at micromolar concns.: (a) integrin-mediated glioblastoma cell adhesion to the extracellular matrix proteins laminin, type IV collagen, and fibronectin; (b) integrin-independent epidermal growth factor-induced adhesion of glioblastoma cells to poly-L-lysine-coated tissue culture plates; (c) fetal bovine serum-induced polymn. of actin and actin stress fiber formation as well epidermal growth factor-stimulated formation of focal adhesion plaques in serum-starved glioblastoma cells; and most importantly, (d) glioblastoma cell migration in in vitro assays of tumor cell invasiveness using tumor cell spheroids and/or Matrigel-coated Boyden chambers. Further preclin. development of **WHI-P131** and **WHI-P154** may provide the basis for the design of more effective adjuvant chemotherapy programs for glioblastoma multiforme.

ST glioblastoma cell adhesion migration dimethoxyquinazoline **WHIP131** **WHIP154**

IT Neuroglia
(glioblastoma multiforme; inhibition of human glioblastoma cell adhesion and invasion by the dimethoxyquinazolines **WHI-P131** and **WHI-P154**)

IT Neuroglia
(glioblastoma, inhibitors; inhibition of human glioblastoma cell adhesion and invasion by the dimethoxyquinazolines **WHI-P131** and **WHI-P154**)

IT Antitumor agents
(glioblastoma; inhibition of human glioblastoma cell adhesion and invasion by the dimethoxyquinazolines **WHI-P131** and **WHI-P154**)

IT Cell adhesion
Cell migration
(inhibition of human glioblastoma cell adhesion and invasion by the dimethoxyquinazolines **WHI-P131** and **WHI-P154**)

IT Actins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibition of serum-induced actin polymn. and actin stress fiber formation in human glioblastoma cells by the dimethoxyquinazolines **WHI-P131** and **WHI-P154**)

IT Extracellular matrix
(integrin-mediated glioblastoma cell adhesion to extracellular matrix proteins; inhibition of human glioblastoma cell adhesion and invasion by the dimethoxyquinazolines **WHI-P131** and **WHI-P154**)

IT Integrins
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(integrin-mediated glioblastoma cell adhesion to extracellular matrix proteins; inhibition of human glioblastoma cell adhesion and invasion by the dimethoxyquinazolines **WHI-P131** and **WHI-P154**)

IT Fibronectins
Laminins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(integrin-mediated glioblastoma cell adhesion to extracellular matrix proteins; inhibition of human glioblastoma cell adhesion and invasion by the dimethoxyquinazolines **WHI-P131** and **WHI-P154**)

IT Organelle
(stress fiber; inhibition of serum-induced actin polymn. and actin stress fiber formation in human glioblastoma cells by the dimethoxyquinazolines **WHI-P131** and **WHI-P154**)

IT Collagens, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(type IV, integrin-mediated glioblastoma cell adhesion to extracellular matrix proteins; inhibition of human glioblastoma cell adhesion and invasion by the dimethoxyquinazolines **WHI-P131** and **WHI-P154**)

IT 62229-50-9, Epidermal growth factor
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(EGF-induced adhesion and formation of focal adhesion plaques; inhibition of human glioblastoma cell adhesion and invasion by the dimethoxyquinazolines **WHI-P131** and **WHI-P154**)

IT **202475-60-3, WHI-P 131**
211555-04-3, WHI-P 154
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of human glioblastoma cell adhesion and invasion by the dimethoxyquinazolines **WHI-P131** and **WHI-P154**)

RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD

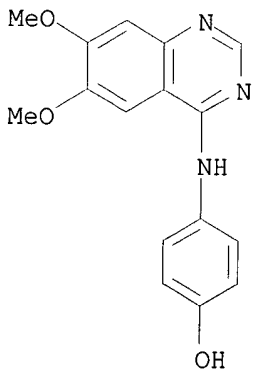
RE

(1) Berens, M; Neurosurg Clin N Am 1990, V1, P1 MEDLINE
(2) Bos, M; Clin Cancer Res 1997, V3, P2099 HCAPLUS
(3) Brandes, A; Cancer Invest 1996, V14, P551 HCAPLUS
(4) Bretcher, M; Cell 1996, V87, P601
(5) Burridge, K; Annu Rev Cell Biol 1988, V4, P487 HCAPLUS
(6) Burridge, K; Bioessays 1989, V10, P104 HCAPLUS
(7) Burridge, K; Cell Differ Dev 1990, V32, P337 HCAPLUS
(8) Carbonetto, S; Trends Neurosci 1984, V7, P382
(9) Chen, H; J Biol Chem 1995, V270, P16995 HCAPLUS
(10) Chen, Q; J Biol Chem 1996, V271, P18122 HCAPLUS
(11) Chintala, S; Clin Exp Metastasis 1996, V14, P358 HCAPLUS
(12) Chrzanowska-Wodnicka, M; J Cell Biol 1996, V133, P1403 HCAPLUS
(13) Cobb, B; Mol Cell Biol 1994, V14, P147 HCAPLUS
(14) Devaux, B; J Neurosurg 1993, V78, P767 MEDLINE
(15) Finchman, V; EMBO J 1998, V17, P81
(16) Finlay, J; Pediatric Neuro-Oncology 1992, P278
(17) Fry, D; Science 1994, V265, P1093 HCAPLUS
(18) Grossman, S; Semin Oncol 1995, V22, P530 HCAPLUS
(19) Hatai, M; FEBS Lett 1994, V350, P113 HCAPLUS
(20) Klemke, R; J Cell Biol 1997, V137, P481 HCAPLUS
(21) Kreth, F; J Neurosurg 1993, V78, P762 MEDLINE
(22) Machesky, L; J Cell Biol 1997, V138, P913 HCAPLUS
(23) Miyamoto, S; J Cell Biol 1996, V135, P1633 HCAPLUS
(24) Miyamoto, S; Science 1995, V267, P883 HCAPLUS
(25) Narla, R; Clin Cancer Res 1998, V4, P1405 HCAPLUS
(26) Nomoto, F; Chem Pharm Bull 1990, V38, P1591
(27) Ouwens, D; Biochem J 1996, V318, P609 HCAPLUS
(28) Pardos, M; Cancer Medicine 1997, V1, P1471
(29) Pardos, M; Semin Surg Oncol 1998, V14, P88

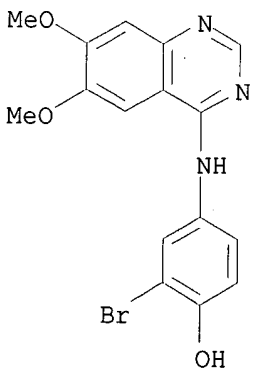
(30) Petch, L; J Cell Sci 1995, V108, P1371 HCAPLUS
(31) Price, J; Eur J Cancer 1996, V32, P1977
(32) Quigley, M; Neurosurgery 1991, V29, P385 MEDLINE
(33) Rohde-Schulz, B; Invasion Metastasis 1995, V15, P1 HCAPLUS
(34) Russel, D; Pathology of Tumors of the Nervous System Ed 5 1989, P83
(35) Rutka, J; J Neurosurg 1988, V69, P155 HCAPLUS
(36) Sato, M; Cancer Lett 1996, V102, P183 HCAPLUS
(37) Schaller, M; Curr Opin Cell Biol 1994, V6, P705 HCAPLUS
(38) Schwarzbauer, J; Curr Biol 1997, V7, P292
(39) Solic, N; Exp Cell Res 1997, V234, P465 HCAPLUS
(40) Symons, M; J Cell Biol 1991, V114, P503 HCAPLUS
(41) Thomas, C; Catalytic Processes and Proven Catalysts 1970
(42) Venstrom, K; FASEB J 1993, V7, P996 HCAPLUS
(43) Wang, Y; J Cell Biol 1984, V99, P1478 MEDLINE
(44) Yoshida, D; Neurosurgery 1996, V39, P360 MEDLINE
(45) Zachary, I; Int J Biochem Cell Biol 1997, V29, P929 HCAPLUS

IT **202475-60-3, WHI-P 131**
211555-04-3, WHI-P 154
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of human glioblastoma cell adhesion and invasion by the dimethoxyquinazolines **WHI-P131** and **WHI-P154**)

RN 202475-60-3 HCAPLUS
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



RN 211555-04-3 HCAPLUS
CN Phenol, 2-bromo-4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



L40 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:529827 HCAPLUS
TI 4-(3'-bromo-4'hydroxylphenyl)-amino-6,7-dimethoxyquinazoline (**WHI -P154**): A novel quinazoline derivative with potent cytotoxic activity against human glioblastoma cells
AU Narla, R. K.; Liu, X.; Myers, D. E.; Venkatachalam, T.; **Uckun, F. M.**
CS Department Experimental Oncology, **Wayne Hughes** Institute, St. Paul, MN, 55113, USA
SO Book of Abstracts, 216th ACS National Meeting, Boston, August 23-27 (**1998**), MEDI-342 Publisher: American Chemical Society, Washington, D. C.
CODEN: 66KYA2
DT Conference; Meeting Abstract
LA English
AB The novel quinazoline **WHI-P154** exhibited significant cytotoxicity against two glioblastoma cell lines causing apoptotic cell death at micromolar concns. In vitro anti-glioblastoma activity of **WHI-P154** was amplified>200-fold and rendered selective by conjugation to EGF. In vitro treatment with EGF-P154 resulted in killing of glioblastoma cells at nanomolar concns. In vivo administration of EGF-P154 resulted in delayed tumor progression and improved tumor-free survival in a SCID mouse glioblastoma xenograft model. Thus, targeting **WHI-P154** to the EGF-R may be useful in the treatment of glioblastoma.

L40 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:492839 HCAPLUS
DN 129:213579
TI Role of tyrosine kinases in induction of the **c-jun** proto-oncogene in irradiated B-lineage lymphoid cells
AU Goodman, Patricia A.; Niehoff, Lisa B.; **Uckun, Fatih M.**
CS Department of Molecular Genetics, **Wayne Hughes** Institute, St. Paul, MN, 55113, USA
SO Journal of Biological Chemistry (**1998**), 273(28), 17742-17748
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
CC 8-7 (Radiation Biochemistry)
Section cross-reference(s): 28
AB Exposure of B-lineage lymphoid cells to ionizing radiation induces an elevation of **c-jun** proto-oncogene mRNA levels. This signal is abrogated by protein-tyrosine kinase (PTK) inhibitors, indicating that activation of an as yet unidentified PTK is mandatory for radiation-induced **c-jun** expression. Here, we provide exptl. evidence that the cytoplasmic tyrosine kinases BTK, SYK, and LYN are not required for this signal. Lymphoma B-cells rendered deficient for LYN, SYK, or both by targeted gene disruption showed increased **c -jun** expression levels after radiation exposure, but the magnitude of the stimulation was lower than in wild-type cells. Thus, these PTKs may participate in the generation of an optimal signal. Notably, an inhibitor of JAK-3 (Janus family kinase-3) abrogated radiation-induced **c-jun** activation, prompting the hypothesis that a chicken homolog of JAK-3 may play a key role in initiation of the radiation-induced **c-jun** signal in B-lineage lymphoid cells.
ST gamma irradn **cjun** lymphocyte tyrosine kinase
IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**c-jun**; role of tyrosine kinases in induction of

c-jun proto-oncogene in irradiated B-lineage lymphoid cells)

IT Gamma ray
(irradn.; role of tyrosine kinases in induction of **c-jun** proto-oncogene in irradiated B-lineage lymphoid cells)

IT B cell (lymphocyte)
(role of tyrosine kinases in induction of **c-jun** proto-oncogene in irradiated B-lineage lymphoid cells)

IT **202475-60-3P 211555-04-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(role of tyrosine kinases in induction of **c-jun** proto-oncogene in irradiated B-lineage lymphoid cells)

IT 80449-02-1, Tyrosine kinase 138674-26-7, SYK Tyrosine kinase 140208-17-9, LYN Tyrosine kinase 149147-12-6, Bruton's Tyrosine kinase **157482-36-5, JAK-3 kinase**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(role of tyrosine kinases in induction of **c-jun** proto-oncogene in irradiated B-lineage lymphoid cells)

IT 123-30-8 4998-07-6 16750-67-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(role of tyrosine kinases in induction of **c-jun** proto-oncogene in irradiated B-lineage lymphoid cells)

IT 4959-60-8P 5004-88-6P 13790-39-1P 13794-72-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(role of tyrosine kinases in induction of **c-jun** proto-oncogene in irradiated B-lineage lymphoid cells)

RE.CNT 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Angel, P; Nature 1988, V332, P166 HCAPLUS
(2) Aoki, Y; Proc Natl Acad Sci U S A 1994, V91, P10606 HCAPLUS
(3) Bohmann, D; Science 1998, V238, P1386
(4) Chae, H; Cancer Res 1993, V53, P447 HCAPLUS
(5) Chen, Y; J Biol Chem 1996, V271, P31929 HCAPLUS
(6) Chomczynski, P; Biochemistry 1987, V162, P156 HCAPLUS
(7) Collotta, F; J Biol Chem 1992, V267, P18278
(8) Danial, N; Science 1995, V269, P1875 HCAPLUS
(9) Demoulin, J; Mol Cell Biol 1996, V16, P4710 HCAPLUS
(10) Derijard, B; Cell 1994, V76, P1025 HCAPLUS
(11) Dibirdik, I; J Biol Chem 1998, V273, P4035 HCAPLUS
(12) Dosch, J; Oncogene 1996, V13, P1927 HCAPLUS
(13) Feinberg, A; Anal Biochem 1983, V132, P6 HCAPLUS
(14) Friedman, R; Nature 1985, V314, P637 HCAPLUS
(15) Fusaki, N; J Biol Chem 1997, V272, P6214 HCAPLUS
(16) Gurniak, C; Blood 1996, V87, P3151 HCAPLUS
(17) Ham, J; Neuron 1995, V14, P927 HCAPLUS
(18) Hanissian, S; Immunity 1997, V6, P379 HCAPLUS
(19) Haque, S; Proc Natl Acad Sci U S A 1997, V94, P8563 HCAPLUS
(20) Hibbs, M; Cell 1995, V83, P301 HCAPLUS
(21) Hibi, M; Genes Dev 1993, V7, P2135 HCAPLUS
(22) Hoffman, S; Genomics 1997, V43, P109 HCAPLUS
(23) Ihle, J; Bioessays 1996, V18, P95 HCAPLUS
(24) Ihle, J; Philos Trans R Soc Lond B Biol Sci 1996, V351, P159 HCAPLUS
(25) Johnston, J; J Biol Chem 1995, V270, P28527 HCAPLUS
(26) Jugloff, L; J Immunol 1997, V159, P1096 HCAPLUS
(27) Kaneko, S; Clin Exp Immunol 1997, V109, P185 HCAPLUS
(28) Karin, M; Curr Opin Cell Biol 1997, V9, P240 HCAPLUS
(29) Kharbanda, S; J Clin Invest 1990, V86, P1517 HCAPLUS
(30) Kumar, A; Oncogene 1996, V13, P2009 HCAPLUS
(31) Kurosaki, T; Curr Opin Immunol 1997, V9, P309 HCAPLUS
(32) Kurosaki, T; J Exp Med 1995, V182, P1815 HCAPLUS

(33) Larner, A; J Biol Chem 1986, V261, P453 HCAPLUS
(34) Larner, A; Proc Natl Acad Sci U S A 1984, V81, P6733 HCAPLUS
(35) Law, D; Curr Biol 1993, V3, P645 HCAPLUS
(36) Leonard, W; Nat Med 1996, V2, P968 HCAPLUS
(37) Levy, D; Cytokine and Growth Factor Rev 1997, V8, P81 HCAPLUS
(38) Mitchell, P; Science 1989, V245, P371 HCAPLUS
(39) Musti, A; Science 1997, V275, P400 HCAPLUS
(40) Myers, D; Proc Natl Acad Sci U S A 1995, V92, P9575 HCAPLUS
(41) Naka, T; Nature 1997, V387, P924 HCAPLUS
(42) Neuberg, M; Nature 1989, V341, P589
(43) Nomoto, F; Chem Pharm Bull (Tokyo) 1990, V38, P1591
(44) Nosaka, T; Science 1995, V270, P800 HCAPLUS
(45) Qin, S; J Biol Chem 1997, V272, P2098 HCAPLUS
(46) Rathbun, R; Blood V90, P974 HCAPLUS
(47) Riedy, M; Genomics 1996, V37, P57 HCAPLUS
(48) Rolling, C; FEBS Lett 1996, V393, P53 HCAPLUS
(49) Rolling, C; Oncogene 1995, V10, P1757 HCAPLUS
(50) Rosette, C; Science 1996, V274, P1194 HCAPLUS
(51) Rubin, E; Mol Pharmacol 1991, V39, P697 HCAPLUS
(52) Ryder, K; Proc Natl Acad Sci U S A 1998, V85, P1487
(53) Safford, M; Exp Hematol (N Y) 1997, V25, P374 HCAPLUS
(54) Safford, M; Exp Hematol (N Y) 1997, V25, P650
(55) Saouaf, S; Proc Natl Acad Sci U S A 1994, V91, P9524 HCAPLUS
(56) Schutte, J; Cell 1989, V59, P987 MEDLINE
(57) Sharfe, N; Clin Exp Immunol 1997, V108, P552 HCAPLUS
(58) Sharfe, N; J Immunol 1997, V159, P1107 HCAPLUS
(59) Takata, M; J Exp Med 1995, V182, P907 HCAPLUS
(60) Thomas, C; Catalytic Processes and Proven Catalysts 1970
(61) Thomis, D; Science 1995, V270, P794 HCAPLUS
(62) Tortolani, P; J Immunol 1995, V155, P5220 HCAPLUS
(63) Tuel-Ahlgren, L; Leuk Lymphoma 1996, V20, P417 MEDLINE
(64) Uckun, F; J Clin Invest 1993, V91, P1044 HCAPLUS
(65) Uckun, F; Science 1995, V267, P886 MEDLINE
(66) Uckun, F; Science 1996, V273, P1096 HCAPLUS
(67) Verheij, M; Nature 1996, V380, P75 HCAPLUS
(68) Witthuhn, B; Leuk Lymphoma, in press 1998
(69) Yin, T; J Biol Chem 1995, V270, P20497 HCAPLUS

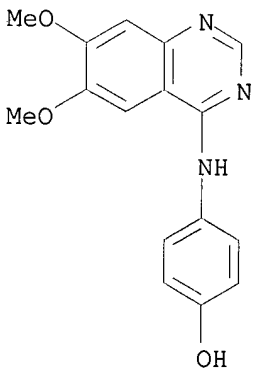
IT **202475-60-3P 211555-04-3P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(role of tyrosine kinases in induction of **c-jun** proto-oncogene in irradiated B-lineage lymphoid cells)

RN 202475-60-3 HCAPLUS

CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



RN 211555-04-3 HCAPLUS

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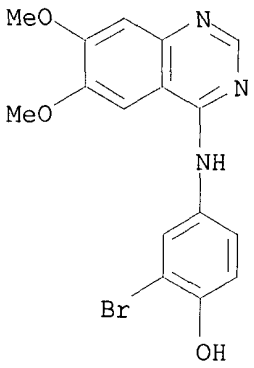


IT **157482-36-5, JAK-3 kinase**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(role of tyrosine kinases in induction of **c-jun** proto-oncogene in irradiated B-lineage lymphoid cells)
RN 157482-36-5 HCAPLUS
CN Kinase (phosphorylating), JAK3 protein (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L40 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:401227 HCAPLUS
DN 129:170172
TI 4-(3'-Bromo-4'hydroxylphenyl)-amino-6,7-dimethoxyquinazoline: a novel quinazoline derivative with potent cytotoxic activity against human glioblastoma cells
AU Narla, Rama Krishna; Liu, Xing-Ping; Myers, Dorothea E.; **Uckun, Fatih M.**
CS Department of Experimental Oncology, **Hughes** Institute, St. Paul, MN, 55113, USA
SO Clinical Cancer Research (**1998**), 4(6), 1405-1414
CODEN: CCREF4; ISSN: 1078-0432
PB American Association for Cancer Research
DT Journal
LA English
CC 1-6 (Pharmacology)
AB The novel quinazoline deriv. 4-(3'-bromo-4'-hydroxylphenyl)-amino-6,7-dimethoxyquinazoline (**WHI-P154**) exhibited significant cytotoxicity against U373 and U87 human glioblastoma cell lines, causing apoptotic cell death at micromolar concns. The in vitro antiglioblastoma activity of **WHI-P154** was amplified >200-fold and rendered selective by conjugation to recombinant human epidermal growth factor (EGF). The EGF-P154 conjugate was able to bind to and enter target glioblastoma cells within 10-30 min via receptor (R)-mediated endocytosis by inducing internalization of the EGF-R mols. In vitro treatment with EGF-P154 resulted in killing of glioblastoma cells at nanomolar concns. with an IC50 of 813 .+-. 139 nM, whereas no cytotoxicity against EGF-R-neg. leukemia cells was obsd., even at concns. as high as 100 .mu.M. The in vivo administration of EGF-P154 resulted in delayed tumor progression and improved tumor-free survival in a severe combined immunodeficient mouse glioblastoma xenograft model. Whereas none of the control mice remained alive tumor-free beyond 33 days (median tumor-free survival, 19 days) and all control mice had tumors that rapidly progressed to reach an av. size of >500 mm3 by 58 days, 40% of mice treated for 10 consecutive days with 1 mg/kg/day EGF-P154 remained alive and free of

detectable tumors for more than 58 days with a median tumor-free survival of 40 days. The tumors developing in the remaining 60% of the mice never reached a size >50 mm3. Thus, targeting **WHI-P154** to the EGF-R may be useful in the treatment of glioblastoma multiforme.

ST quinazoline deriv **WHIP154** glioblastoma antitumor

IT Drug targeting
(glioblastoma inhibition by quinazoline deriv. **WHI-P154** targeting of EGF receptor)

IT Epidermal growth factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(glioblastoma inhibition by quinazoline deriv. **WHI-P154** targeting of EGF receptor)

IT Neuroglia
(glioblastoma, inhibitors; glioblastoma inhibition by quinazoline deriv. **WHI-P154** targeting of EGF receptor)

IT Antitumor agents
(glioblastoma; glioblastoma inhibition by quinazoline deriv. **WHI-P154** targeting of EGF receptor)

IT 62229-50-9D, Epidermal growth factor, conjugates with quinazoline deriv.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(glioblastoma inhibition by quinazoline deriv. **WHI-P154** targeting of EGF receptor)

IT 21561-09-1P 153436-54-5P **202475-60-3P 211555-04-3P**
211555-05-4P 211555-06-5P 211555-07-6P 211555-08-7P 211555-09-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(glioblastoma inhibition by quinazoline deriv. **WHI-P154** targeting of EGF receptor)

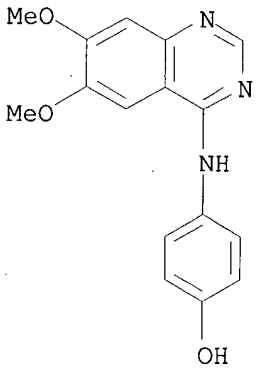
IT 13790-39-1P, 4-Chloro-6,7-dimethoxyquinazoline
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(glioblastoma inhibition by quinazoline deriv. **WHI-P154** targeting of EGF receptor)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

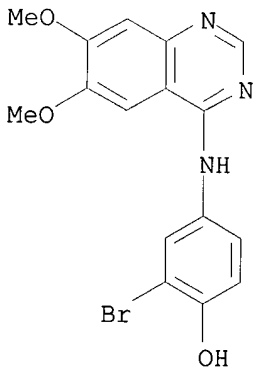
RE

(1) Anderson, P; Cancer Res 1995, V55, P1321 HCAPLUS
(2) Bos, M; Clin Cancer Res 1997, V3, P2099 HCAPLUS
(3) Brandes, A; Cancer Invest 1996, V14, P551 HCAPLUS
(4) Covey, T; Rapid Commun Mass Spectrom 1988, V2, P249 HCAPLUS
(5) Feng, R; J Am Soc Mass Spectrom 1991, V2, P387 HCAPLUS
(6) Finlay, J; Pediatric Neuro-Oncology 1992, P278
(7) Friedman, S; Cancer Res 1995, V55, P2853
(8) Fry, D; Science (Washington DC) 1994, V265, P1093 HCAPLUS
(9) Hoi, S; J Neurosurg 1995, V82, P841
(10) Khazaie, K; Cancer Metastasis Rev 1993, V12, P255 HCAPLUS
(11) Maruno, M; J Neurosurg 1991, V75, P97 MEDLINE
(12) Mendelsohn, J; Biologic Therapy of Cancer:Principles and Practice 1995, P607
(13) Nomoto, F; Chem Pharm Bull 1990, V38, P1591
(14) Pardos, M; Cancer Medicine 1997, VI, P1471
(15) Pardos, M; Semin Surg Oncol 1998, V14, P88
(16) Thomas, C; Catalytic Processes and Proven Catalysts 1970, P1
(17) Torp, S; Cancer Immunol Immunother 1991, V33, P61 HCAPLUS
(18) Uckun, F; Clin Cancer Res 1998, V4, P1125 HCAPLUS
(19) Uckun, F; Clin Cancer Res 1998, V4, P901 HCAPLUS
(20) Uckun, F; J Clin Oncol 1997, V15, P2214 MEDLINE
(21) Uckun, F; Science (Washington DC) 1995, V267, P886 MEDLINE
(22) Waurzyniak, B; Clin Cancer Res 1997, V3, P881 HCAPLUS
(23) Yamazaki, H; Mol Cell Biol 1988, V8, P1816 HCAPLUS

IT **202475-60-3P 211555-04-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(glioblastoma inhibition by quinazoline deriv. **WHI-P154** targeting of EGF receptor)
RN 202475-60-3 HCAPLUS
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



RN 211555-04-3 HCAPLUS
CN Phenol, 2-bromo-4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



L40 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:105843 HCAPLUS
DN 128:136497
TI Aryl and heteroaryl quinazoline compounds which inhibit EGF and/or PDGF receptor tyrosine kinase
IN Myers, Michael R.; Spada, Alfred P.; Maguire, Martin P.; Persons, Paul E.
PA Rhone-Poulenc Rorer Pharmaceuticals Inc., USA
SO U.S., 19 pp., Cont.-in-part of U.S. 5,480,883.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K031-505
ICS C07D239-88; C07D239-93; C07D239-94
NCL 514259000
CC 1-3 (Pharmacology)
FAN.CNT 7
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	US 5710158	A	19980120	US 1994-229886	19940419 <--
	US 5480883	A	19960102	US 1993-166199	19931210 <--
	WO 9515758	A1	19950615	WO 1994-US14180	19941208 <--
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	RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
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	US 5714493	A	19980203	US 1996-652444	19960604 <--
	US 37650	E	20020409	US 2000-496399	20000202 <--
PRAI	US 1991-698420	B2	19910510 <--		
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	WO 1992-US3736	A2	19920506 <--		
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OS MARPAT 128:136497

AB This invention relates to the modulation and/or inhibition of cell signaling, cell proliferation, cell inflammatory response, the control of abnormal cell growth and cell reprodn. More specifically, this invention relates to the use of mono- and/or bicyclic aryl or heteroaryl quinazoline compds. in inhibiting cell proliferation, including compds. which are useful protein tyrosine kinase (PTK) inhibitors. The method of treating cell proliferation using said quinazoline compds. and their use in pharmaceutical compns. is described. A no. of compds. were tested for inhibition of PDGF receptor cell-free antophosphorylation procedure.

ST quinazoline aryl EGF PDGF kinase inhibitor; EGF tyrosine kinase inhibitor quinazoline aryl; PDGF tyrosine kinase inhibitor quinazoline aryl; heteroaryl quinazoline EGF PDGF kinase inhibitor

IT Anti-inflammatory agents
Cell proliferation
(aryl and heteroaryl quinazoline compds. which inhibit EGF and/or PDGF receptor tyrosine kinase)

IT Epidermal growth factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibitors; aryl and heteroaryl quinazoline compds. which inhibit EGF and/or PDGF receptor tyrosine kinase)

IT Platelet-derived growth factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(receptors, inhibitors; aryl and heteroaryl quinazoline compds. which inhibit EGF and/or PDGF receptor tyrosine kinase)

IT Platelet-derived growth factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.beta., inhibitors; aryl and heteroaryl quinazoline compds. which inhibit EGF and/or PDGF receptor tyrosine kinase)

IT 21561-09-1 21561-11-5 37514-62-8 88404-44-8 146535-68-4
146885-03-2 153436-53-4 153437-65-1 153437-80-0 167410-34-6
167410-63-1 167410-65-3 167410-67-5 167410-69-7 174891-29-3
174892-31-0 174892-57-0 174892-58-1 186138-04-5 186138-08-9
202475-38-5 202475-41-0 202475-44-3 202475-49-8 202475-51-2
202475-54-5 202475-55-6 202475-57-8 202475-58-9 202475-59-0
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202475-64-7 202475-65-8 202475-66-9 202475-67-0 202475-68-1
202475-69-2 202475-70-5 202475-71-6
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aryl and heteroaryl quinazoline compds. which inhibit EGF and/or PDGF receptor tyrosine kinase)

IT 80449-02-1, Protein tyrosine kinase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibitors; aryl and heteroaryl quinazoline compds. which inhibit EGF and/or PDGF receptor tyrosine kinase)

IT 62229-50-9, Epidermal growth factor
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(receptors, inhibitors; aryl and heteroaryl quinazoline compds. which inhibit EGF and/or PDGF receptor tyrosine kinase)

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD

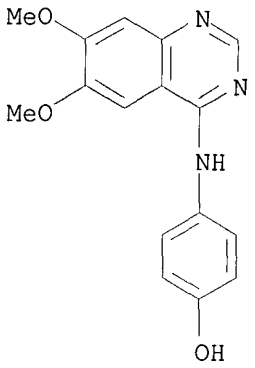
RE

(1) Anon; GB 1543560 1979 HCAPLUS
(2) Anon; EP 0520722 1992 HCAPLUS
(3) Anon; WO 9220642 1992 HCAPLUS
(4) Anon; EP 0566225 A1 1993
(5) Anon; EP 0635498 A1 1995 HCAPLUS
(6) Anon; WO 9523141 1995 HCAPLUS
(7) Barker; 1985 HCAPLUS
(8) Barker; US 5457105 1995 HCAPLUS
(9) Barker; US 5580870 1996 HCAPLUS
(10) Barnish; 1975 HCAPLUS
(11) Barnish; US 3971783 1976
(12) Budesinsky; 1977 HCAPLUS
(13) Byford; 1989 HCAPLUS
(14) Cronin; 1969 HCAPLUS
(15) Epling; 1988 HCAPLUS
(16) Foster; US 3985749 1976 HCAPLUS
(17) Gopinathan; 1987 HCAPLUS
(18) Ishikura; Heterocycles 1985, V23(9), P2375 HCAPLUS
(19) Kobayashi; US 4322420 1982 HCAPLUS
(20) Kobayashi; US 4464375 1984 HCAPLUS
(21) Kreighbaum; US 4343940 1982 HCAPLUS
(22) Lederer; 1976 HCAPLUS
(23) Lesher; US 4465686 1984 HCAPLUS
(24) Lesher; US 4599423 1986 HCAPLUS
(25) Lin; 1982 HCAPLUS
(26) Marquis; 1972 HCAPLUS
(27) Saeed; J Heterocyclic Chem 1983, V20, P1739 HCAPLUS
(28) Shen; US 3718743 1973 HCAPLUS
(29) Stern; J Am Chem Soc 1989, V111(3), P877 HCAPLUS
(30) Takase; 1993 HCAPLUS
(31) Takase; J Med Chem 1994, V37, P2106 HCAPLUS
(32) Tamano; Tetrahedron 1982, V38(22), P3347
(33) Witzel; US 3715358 1973
(34) Yamamoto; Chem Pharm Bull 1982, V30(6), P2003 HCAPLUS
(35) Yamamoto; Synthesis 1986, P564 HCAPLUS
(36) Yoshina; 1976 HCAPLUS
(37) Young; US 4661499 1987 HCAPLUS

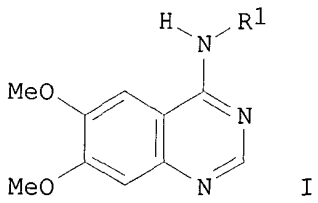
IT **202475-60-3**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aryl and heteroaryl quinazoline compds. which inhibit EGF and/or PDGF receptor tyrosine kinase)

RN 202475-60-3 HCAPLUS

CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



L40 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 1997:165787 HCAPLUS
DN 126:264049
TI The preparation and SAR of 4-(anilino), 4-(phenoxy), and 4-(thiophenoxy)-quinazolines: inhibitors of p56lck and EGF-R tyrosine kinase activity
AU Myers, Michael R.; Setzer, Natalie N.; Spada, Alfred P.; Zulli, Allison L.; Hsu, Chin-Yi J.; Zilberstein, Asher; Johnson, Susan E.; Hook, Linda E.; Jacoski, Mary V.
CS Deps. Med. Chem., Rhone-Poulenc Rorer Pharmaceuticals, Collegeville, PA, 19426-0107, USA
SO Bioorganic & Medicinal Chemistry Letters (**1997**), 7(4), 417-420
CODEN: BMCLE8; ISSN: 0960-894X
PB Elsevier
DT Journal
LA English
CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 7
GI



I

AB The authors report herein their preliminary results of a SAR study of quinazoline-based inhibitors of p51ck and EGF-R tyrosine kinase activity. The most potent inhibitor of p56lck identified, RPR-108518A [I, R1 = 3,4,5-(MeO)3C6H2, X = NH], has an IC50 of 0.50 .mu.M. The 3-chlorophenoxy- and 3-chlorothiophenoxy- derivs. I (R1 = 3-ClC6H4, X = O, S) were also shown to be extremely potent EGF-R inhibitors.
ST anilinoquinazoline prepn tyrosine kinase inhibitor; phenoxyquinazoline prepn tyrosine inhibitor; thiophenoxyquinazoline prepn tyrosine kinase inhibitor; tyrosine kinase inhibitor anilinoquinazoline phenoxyquinazoline thiophenoxyquinazoline; quinazoline prepn tyrosine kinase inhibitor; structure activity quinazoline tyrosine kinase inhibitor
IT Structure-activity relationship
(enzyme-inhibiting; prepn. and tyrosine kinase inhibitory activity of

anilino-, phenoxy-, and thiophenoxy-quinazolines and structure activity)

IT 146871-70-7P 153437-07-1P 159768-25-9P 167410-34-6P 167410-65-3P
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188829-39-2P 188829-40-5P 188829-41-6P 188829-42-7P
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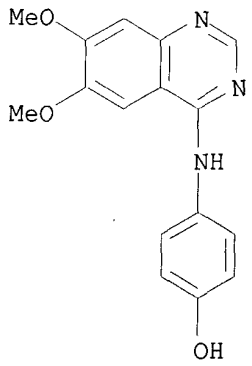
188829-48-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and tyrosine kinase inhibitory activity of anilino-, phenoxy-, and thiophenoxy-quinazolines and structure activity)

IT 80449-02-1, Tyrosine kinase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(prepn. and tyrosine kinase inhibitory activity of anilino-, phenoxy-, and thiophenoxy-quinazolines and structure activity)

IT **188829-39-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and tyrosine kinase inhibitory activity of anilino-, phenoxy-, and thiophenoxy-quinazolines and structure activity)

RN 188829-39-2 HCAPLUS
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-, monohydrochloride (9CI) (CA INDEX NAME)



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L50 ANSWER 1 OF 2 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.DUPLICATE 1
AN 1998352446 EMBASE
TI Inhibition of human glioblastoma cell adhesion and invasion by 4-(4'-hydroxylphenyl)-amino-6,7-dimethoxyquinazoline (**WHI-P131**) and 4-(3'-bromo- 4'-hydroxylphenyl)amino-6,7-dimethoxyquinazoline (

WHI-P154).

AU Narla R.K.; Liu X.-P.; Klis D.; Uckun F.M.
CS F.M. Uckun, Wayne Hughes Institute, 2665 Long Lake Road, St. Paul, MN 55113, United States

SO Clinical Cancer Research, (1998) 4/10 (2463-2471).
Refs: 45
ISSN: 1078-0432 CODEN: CCREF4
CY United States
DT Journal; Article
FS 008 Neurology and Neurosurgery
016 Cancer
037 Drug Literature Index
LA English
SL English

AB Glioblastoma multiforme is a highly invasive primary brain tumor with a disappointingly high local recurrence rate and mortality despite intensive multimodality treatment programs. Therefore, new agents that are capable of inhibiting the infiltration of normal brain parenchyma by glioblastoma cells are urgently needed. Here, we show that the novel quinazoline derivatives 4- (4 'hydroxylphenyl)-amino-6,7-dimethoxyquinazoline (**WHI-P131**) and 4-(3'- bromo-4'hydroxylphenyl)-amino-6,7-dimethoxyquinazoline (**WHI-P154**) are potent inhibitors of glioblastoma cell adhesion and migration. Specifically, both compounds inhibited at micromolar concentrations: (a) integrin-mediated glioblastoma cell adhesion to the extracellular matrix proteins laminin, type IV collagen, and fibronectin; (b) integrin-independent epidermal growth factor-induced adhesion of glioblastoma cells to poly-L-lysine-coated tissue culture plates; (c) fetal bovine serum-induced polymerization of actin and actin stress fiber formation as well epidermal growth factor-stimulated formation of focal adhesion plaques in serum-starved glioblastoma cells; and most importantly, (d) glioblastoma cell migration in in vitro assays of tumor cell invasiveness using tumor cell spheroids and/or Matrigel-coated Boyden chambers. Further preclinical development of **WHI-P131** and **WHI-P154** may provide the basis for the design of more effective adjuvant chemotherapy programs for glioblastoma multiforme.

CT Medical Descriptors:
*glioblastoma
cell adhesion
cell invasion
cancer invasion
cancer inhibition
antineoplastic activity
drug effect
drug screening
cell migration
human
controlled study
human cell
article
priority journal
Drug Descriptors:
***4 (4' hydroxyphenyl)amino 6,7 dimethoxyquinazoline: DV, drug development**
***4 (4' hydroxyphenyl)amino 6,7 dimethoxyquinazoline: PD, pharmacology**
***4 (3' bromo 4' hydroxyphenyl)amino 6,7 dimethoxyquinazoline: DV, drug development**
***4 (3' bromo 4' hydroxyphenyl)amino 6,7 dimethoxyquinazoline: PD, pharmacology**
quinazoline derivative: DV, drug development
quinazoline derivative: PD, pharmacology
unclassified drug

whi p 131
whi p 154
CN **Whi p 131; Whi p 154**

L50 ANSWER 2 OF 2 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.DUPLICATE 2
AN 1998191566 EMBASE
TI 4-(3'-Bromo-4'hydroxylphenyl)-amino-6,7-dimethoxyquinazoline: A novel quinazoline derivative with potent cytotoxic activity against human glioblastoma cells.
AU Narla R.K.; Liu X.-P.; Myers D.E.; Uckun F.M.
CS F.M. Uckun, Hughes Institute, 2665 Long Lake Road, St. Paul, MN 55113, United States
SO Clinical Cancer Research, (1998) 4/6 (1405-1414).
Refs: 23
ISSN: 1078-0432 CODEN: CCREF4
CY United States
DT Journal; Article
FS 008 Neurology and Neurosurgery
016 Cancer
037 Drug Literature Index
LA English
SL English
AB The novel quinazoline derivative 4-(3'-bromo-4'-hydroxylphenyl)-amino-6,7-dimethoxyquinazoline (**WHI-P154**) exhibited significant cytotoxicity against U373 and U87 human glioblastoma cell lines, causing apoptotic cell death at micromolar concentrations. The in vitro antiglioblastoma activity of **WHI-P154** was amplified >200-fold and rendered selective by conjugation to recombinant human epidermal growth factor (EGF). The EGF-P154 conjugate was able to bind to and enter target glioblastoma cells within 10-30 min via receptor (R)-mediated endocytosis by inducing internalization of the EGF-R molecules. In vitro treatment with EGF-P154 resulted in killing of glioblastoma cells at nanomolar concentrations with an IC50 of 813 .+-. 139 nM, whereas no cytotoxicity against EGF-R-negative leukemia cells was observed, even at concentrations as high as 100 .mu.M. The in vivo administration of EGF-P154 resulted in delayed tumor progression and improved tumor-free survival in a severe combined immunodeficient mouse glioblastoma xenograft model. Whereas none of the control mice remained alive tumor-free beyond 33 days (median tumor-free survival, 19 days) and all control mice had tumors that rapidly progressed to reach an average size of >500 mm3 by 58 days, 40% of mice treated for 10 consecutive days with 1 mg/kg/day EGF-P154 remained alive and free of detectable tumors for more than 58 days with a median tumor-free survival of 40 days. The tumors developing in the remaining 60% of the mice never reached a size >50 mm3. Thus, targeting **WHI-P154** to the EGF-R may be useful in the treatment of glioblastoma multiforme.
CT Medical Descriptors:
*glioblastoma: DT, drug therapy
*cancer cell: DT, drug therapy
cytotoxicity
drug potency
antineoplastic activity
target cell
internalization
cancer survival
tumor xenograft
gene targeting
receptor gene
cell death
human
human cell
article
priority journal

Drug Descriptors:
*quinazoline derivative: DO, drug dose
*quinazoline derivative: DT, drug therapy
*quinazoline derivative: PD, pharmacology
***4 (3' bromo 4' hydroxylphenyl)amino 6,7 dimethoxyquinazoline: DO, drug dose**
***4 (3' bromo 4' hydroxylphenyl)amino 6,7 dimethoxyquinazoline: DT, drug therapy**
***4 (3' bromo 4' hydroxylphenyl)amino 6,7 dimethoxyquinazoline: PD, pharmacology**
unclassified drug

=> fil biosis
FILE 'BIOSIS' ENTERED AT 17:12:54 ON 11 JUN 2003
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FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 4 June 2003 (20030604/ED)

=> d all tot

L52 ANSWER 1 OF 2 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1999:106005 BIOSIS
DN PREV199900106005
TI Structure based design of specific inhibitors of Janus kinase 3 (Jak3) as potent anti-leukemic agents.
AU Sudbeck, E. (1); Mao, C.; Liu, X. P.; Narla, R. K.; Chen, C. L.; Waurzyniak, B.; Uckun, F. M.
CS (1) Parker Hughes Cancer Cent., Drug Discovery Program, Dep. Structural Biol., Hughes Inst., St. Paul, MN USA
SO Blood, (**Nov. 15, 1998**) Vol. 92, No. 10 SUPPL. 1 PART 1-2, pp. 599A.
Meeting Info.: 40th Annual Meeting of the American Society of Hematology Miami Beach, Florida, USA December 4-8, 1998 The American Society of Heamatology
. ISSN: 0006-4971.
DT Conference
LA English
CC Pharmacology - General *22002
Biochemical Studies - General *10060
Blood, Blood-Forming Organs and Body Fluids - General; Methods *15001
Neoplasms and Neoplastic Agents - General *24002
General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals *00520
BC Cercopithecidae 86205
Muridae 86375
IT Major Concepts
Pharmacology; Tumor Biology
IT Diseases
acute lymphoblastic leukemia: blood and lymphatic disease, neoplastic disease
IT Chemicals & Biochemicals
anti-leukemic agents; dimethoxyquinazoline; enzyme inhbitors: structure based designs; janus kinase 1; janus kinase 2; janus kinase 3; **WHI-P131**: antineoplastic - drug, enzyme inhibitor - drug, janus kinase 3 inhibitor
IT Alternate Indexing
Leukemia, Lymphocytic, Acute (MeSH)

IT Miscellaneous Descriptors
molecular modeling; Meeting Abstract; Meeting Poster
ORGN Super Taxa
Cercopithecidae: Primates, Mammalia, Vertebrata, Chordata, Animalia; Muridae: Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
cynomolgus monkey (Cercopithecidae); mouse (Muridae): animal model
ORGN Organism Superterms
Animals; Chordates; Mammals; Nonhuman Mammals; Nonhuman Primates; Nonhuman Vertebrates; Primates; Rodents; Vertebrates
RN 9031-44-1 (KINASE)
202475-60-3 (WHI-P131)

L52 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1998:422999 BIOSIS
DN PREV199800422999
TI 4-(3'-bromo-4'hydroxylphyenyl)-amino-6,7-dimethoxyquinazoline (**WHI -P154**): A novel quinazoline derivative with potent cytotoxic activity against human glioblastoma cells.
AU Narla, R. K. (1); Liu, X.; Myers, D. E.; Venkatachalam, T.; Uckun, F. M.
CS (1) Dep. Exp. Oncol., Wayne Hughes Inst., St. Paul, MN 55113 USA
SO Abstracts of Papers American Chemical Society, (1998) Vol. 216, No. 1-3, pp. MEDI 342.
Meeting Info.: 216th National Meeting of the American Chemical Society Boston, Massachusetts, USA August 23-27, 1998 American Chemical Society . ISSN: 0065-7727.
DT Conference
LA English
CC Neoplasms and Neoplastic Agents - Therapeutic Agents; Therapy *24008
Nervous System - Pathology *20506
Pharmacology - Neuropharmacology *22024
General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals *00520
BC Hominidae 86215
IT Major Concepts
Pharmacology; Tumor Biology
IT Chemicals & Biochemicals
4-(3'-bromo-4' hydroxylphenyl)-amino-6,7-dimethoxyquinazoline [WHI-P154]:
antineoplastic - drug, novel quinazoline derivative, cytotoxic activity
IT Miscellaneous Descriptors
Meeting Abstract
ORGN Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
human (Hominidae): glioblastoma cell lines
ORGN Organism Superterms
Animals; Chordates; Humans; Mammals; Primates; Vertebrates
RN 253-82-7D (QUINAZOLINE)

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DICTIONARY FILE UPDATES: 10 JUN 2003 HIGHEST RN 528811-66-7

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http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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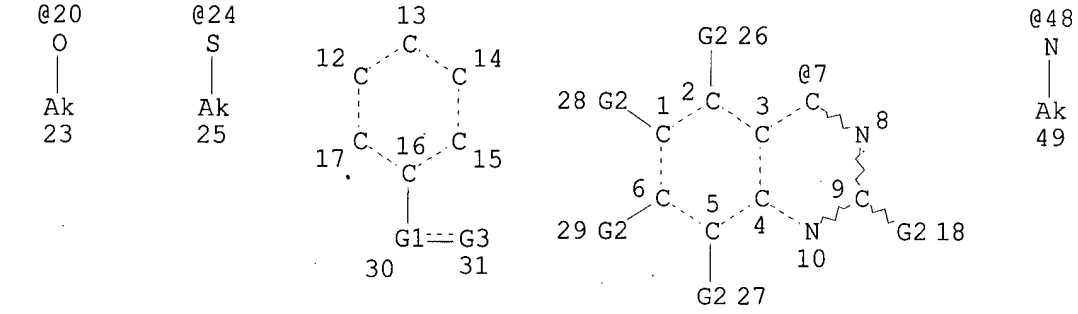

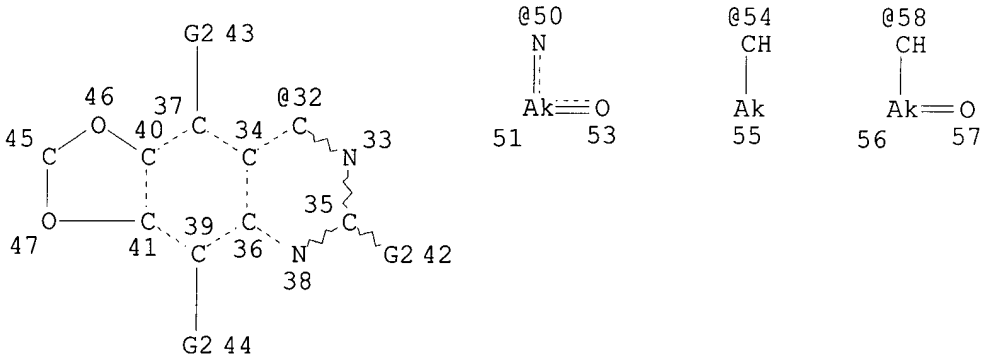

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CONNECT IS M1 RC AT 13
CONNECT IS M1 RC AT 14
CONNECT IS M1 RC AT 15
CONNECT IS M1 RC AT 17
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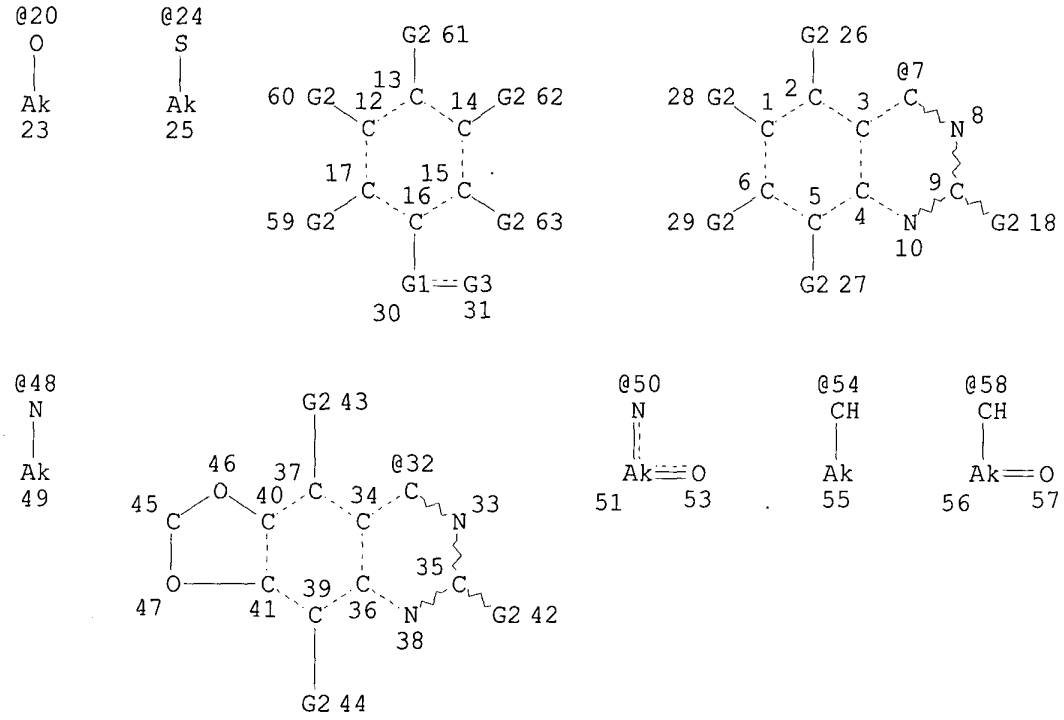
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 53

STEREO ATTRIBUTES: NONE
L55 3070 SEA FILE=REGISTRY CSS FUL L53
L56 STR

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov



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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 58

STEREO ATTRIBUTES: NONE
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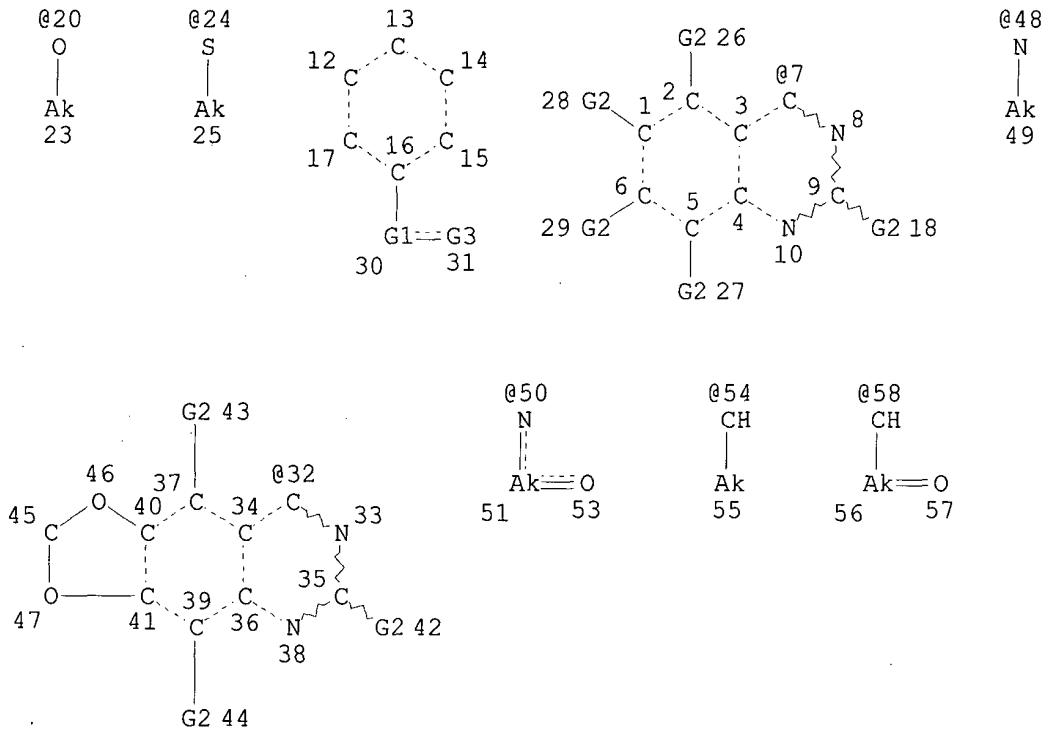

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VAR G3=32/7
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 12
CONNECT IS M1 RC AT 13
CONNECT IS M1 RC AT 14
CONNECT IS M1 RC AT 15
CONNECT IS M1 RC AT 17
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 53

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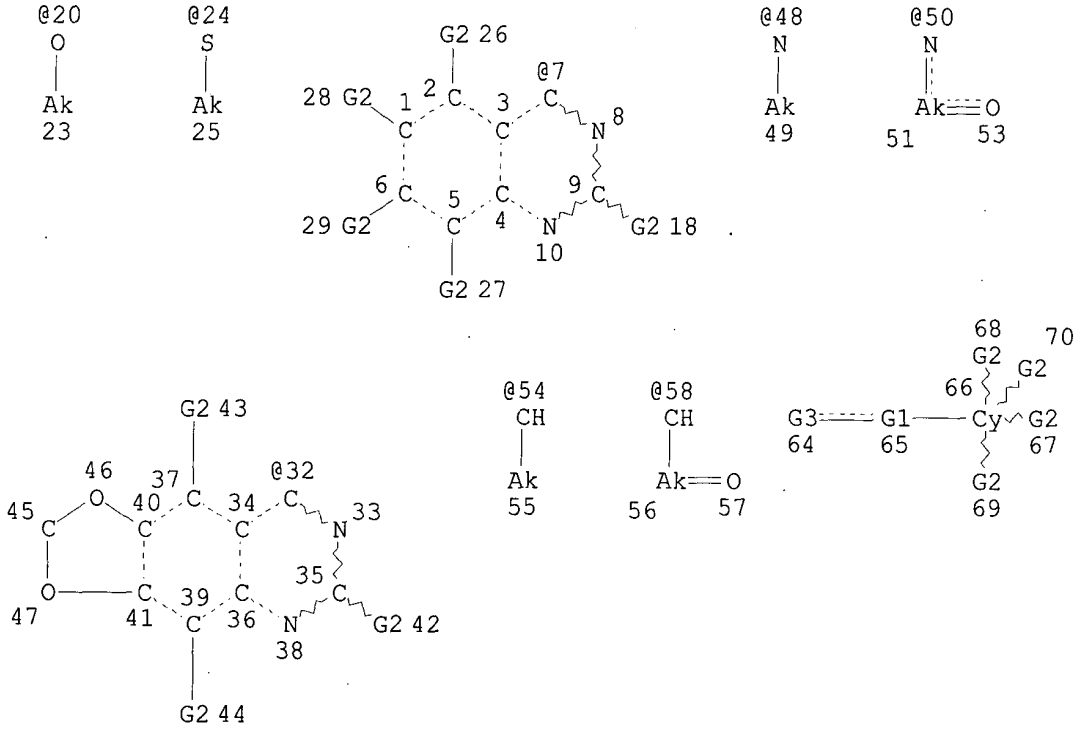

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VAR G3=32/7
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
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STEREO ATTRIBUTES: NONE
L61 135 SEA FILE=REGISTRY SUB=L55 CSS FUL L59

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SAV L61 HOPE345B/A
L62 1237 S L58,L61 NOT L8,L9

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L63 20 S L62

FILE 'REGISTRY' ENTERED AT 17:27:06 ON 11 JUN 2003
L64 73 S L62 AND CAOLD/LC

FILE 'HCAPLUS' ENTERED AT 17:27:33 ON 11 JUN 2003

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L66           18 S L65 AND L1
L67           18 S L65 AND (HUGHES? OR PARKER? OR WAYNE?)/PA,CS
L68           18 S L66,L67
L69            9 S L65 AND L24
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L71            5 S L65 AND (CJUN OR C JUN)
L72          218 S L65 AND (PD<=19980630 OR PRD<=19980630 OR AD<=19980630)
L73            2 S L72 AND L68
L74            1 S L72 AND L69-L71
L75            3 S L73,L74
L76          207 S L65 AND PY<=1998
L77            0 S L76 AND L69-L71
L78          218 S L72,L76
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                 E E3+ALL
L79         2709 S E2
L80          579 S E6
L81         4355 S ?GLIOBLASTOM?
                 E NEUROGLIA/CT
                 E E3+ALL
L82        31326 S E5+NT
                 E BRAIN NEOPLASM/CT
                 E E4+ALL
                 E E2+ALL
L83         4860 S E7,E6+NT
L84            9 S L78 AND L79-L83
L85            3 S L78 AND BRAIN(L)(?CANCER? OR ?TUMOR? OR ?NEOPLAS? OR ?MALIGN
L86           10 S L84,L85,L75
                 E ANTITUMOR/CT
                 E E5+ALL
L87       158675 S E4,E3,E20-E26
L88        30685 S E28+NT OR E29+NT OR E30+NT
L89       214899 S E31+NT
L90           73 S L78 AND L87-L89
L91            9 S L90 AND L86
L92           10 S L86,L91

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=> d 192 all hitstr tot

L92 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 2001:906210 HCAPLUS
DN 136:15231
TI Methods using a tyrosine kinase inhibitor to modulate the resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors
IN Huang, H.-J. Su; Nagane, Motoo; Cavenee, Webster K.; Levitzki, Alexander; Gazit, Aviv
PA USA
SO U.S. Pat. Appl. Publ., 22 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM A61K031-33
ICS A61K031-505; A61K033-24; C07D239-00; C07D491-00; A61K031-44
NCL 514259000
CC 1-6 (Pharmacology)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2001051628	A1	20011213	US 1998-71541	19980504 <--
PRAI	US 1998-71541		19980504 <--		

AB Methods and compns. are provided for enhancing the activity of various therapeutic agents that induce apoptosis by modulating the apoptosis-inhibiting effects of the expression products of mutant epidermal growth factor receptor (EGFR) genes. Methods and compns. of particular use in the treatment of cancers, e.g. glioma, that express such a mutant EGFR gene are provided. The methods of the invention use a tyrosine kinase inhibitor (e.g. tyrphostin AG1478) in combination with an apoptosis-inducing therapeutic agent (e.g. cisplatin).
ST antitumor tyrosine kinase inhibitor apoptosis agent; EGF receptor cancer apoptosis tyrosine kinase inhibitor antitumor agent; tyrphostin AG1478 cisplatin antitumor glioma
IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Bcl-xL; tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)
IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(EGF receptor; tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)
IT Epidermal growth factor receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gene; tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)
IT **Neuroglia**
(glioma, inhibitors; tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)
IT **Antitumor agents**
(glioma; tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)
IT Lung, neoplasm
Ovary, neoplasm
(inhibitors; tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)
IT **Antitumor agents**
(lung; tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)
IT **Antitumor agents**

(mammary gland; tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)

IT Mammary gland
(neoplasm, inhibitors; tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)

IT **Antitumor agents**
(ovary; tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)

IT Drug interactions
(synergistic; tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)

IT **Antitumor agents**
Apoptosis
Drug delivery systems
Drug resistance
(tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)

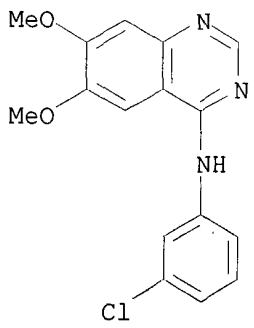
IT 169592-56-7, Caspase-3
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(-like; tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)

IT 79079-06-4, EGF receptor tyrosine kinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)

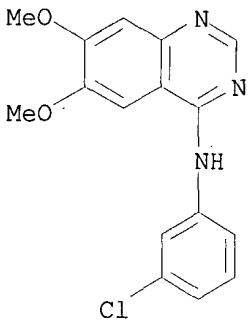
IT 57-22-7, Vincristine 15663-27-1, Cisplatin 33069-62-4, Paclitaxel **153436-53-4**, Tyrphostin AG 1478 **153436-53-4D**, Tyrphostin AG 1478, derivs.
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)

IT **153436-53-4**, Tyrphostin AG 1478 **153436-53-4D**, Tyrphostin AG 1478, derivs.
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tyrosine kinase inhibitor to modulate resistance of cells to apoptosis mediated by mutant epidermal growth factor receptors)

RN 153436-53-4 HCAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 153436-53-4 HCAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



L92 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:764027 HCAPLUS
DN 132:9009
TI Quinazolines and conjugates thereof for treating **brain tumors**
IN **Uckun, Fatih M.**; Narla, Rama K.; Liu, Xing-Ping
PA **Wayne Hughes Institute, USA**
SO PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07D239-94
ICS C07D239-88; C07D239-74; A61K031-505
CC 1-6 (Pharmacology)
Section cross-reference(s): 2, 28, 63
FAN.CNT 1

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PRAI	US 1998-87479	A	19980529	<--		
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	US 1999-361088	A1	19990726			

OS MARPAT 132:9009
AB Substituted quinazoline compds. and conjugates useful for inhibiting the growth of **brain tumor** cells and for inhibiting adhesion and migration of **brain tumor** cells are provided. The compds. include 4-(3'-bromo-4'-hydroxyphenyl)amino-6,7-dimethoxyquinazoline and this compd. covalently bound to e.g. EGF.
ST quinazoline deriv **brain cancer** treatment; EGF quinazoline conjugate **brain cancer** treatment; adhesion

brain cancer cell quinazoline deriv; migration
brain cancer cell quinazoline deriv

IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antibodies to, conjugates; quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT Structure-activity relationship
(**antitumor**; quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT **Antitumor agents**
Antitumor agents
(**brain**; quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT Antibodies
Cytokines
Growth factors, animal
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates; quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT **Neuroglia**
(**glioblastoma**, cell adhesion; quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT **Neuroglia**
Neuroglia
(**glioblastoma**, inhibitors; quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT **Antitumor agents**
(**glioblastoma**; quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT **Brain, neoplasm**
Brain, neoplasm
(inhibitors; quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT **Brain, neoplasm**
(**medulloblastoma**, cell adhesion; quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT **Antitumor agents**
(**metastasis**; quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT Actins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(polymn.; quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT Apoptosis
Cell adhesion
Cell migration
Drug delivery systems
Drug targeting
(quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT Epidermal growth factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT Biological transport
(uptake; quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT 211555-04-3DP, WHI-P154, EGF conjugates
RL: BAC (Biological activity or effector, except adverse); BPR (Biological

process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT 62229-50-9, Epidermal growth factor
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT **21561-09-1P**, WHI-P 258 **153436-54-5P**, WHI-P 79
202475-60-3P, WHI-P131 211555-04-3P, WHI-P154 **211555-05-4P**, WHI-P 97 **211555-06-5P**, WHI-P 111 **211555-07-6P**, WHI-P 132 **211555-08-7P**, WHI-P180 **211555-09-8P**, WHI-P 197 **251376-04-2P**, WHI-P 292
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT 62229-50-9D, Epidermal growth factor, quinazoline deriv. conjugates
202475-60-3D, WHI-P131, EGF conjugates **251347-48-5** **251347-49-6** **251347-50-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

IT 62-53-3, Benzenamine, reactions 95-55-6, 2-Hydroxyaniline 123-30-8, 4-Hydroxyaniline 591-19-5, 3-Bromoaniline 591-27-5, 3-Hydroxyaniline 609-21-2, 3,5-Dibromo-4-hydroxyaniline 2834-92-6 3964-52-1, 3-Chloro-4-hydroxyaniline 7745-91-7, 3-Bromo-4-methylaniline 13790-39-1, 4-Chloro-6,7-dimethoxyquinazoline 16750-67-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

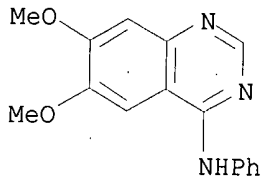
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

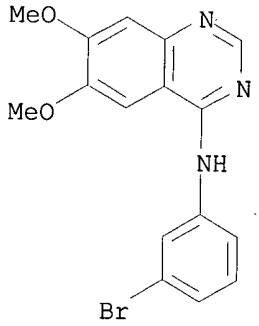
(1) Narla, R; Clinical Cancer Research 1998, V4(6), P1405 HCAPLUS
(2) Rhone-Poulenc; WO 9515758 A 1995 HCAPLUS
(3) Zeneca; EP 0566226 A 1993 HCAPLUS
(4) Zeneca; WO 9615118 A 1996 HCAPLUS
(5) Zeneca; WO 9730035 A 1997 HCAPLUS
(6) Zeneca; WO 9732856 A 1997 HCAPLUS

IT **21561-09-1P**, WHI-P 258 **153436-54-5P**, WHI-P 79
211555-05-4P, WHI-P 97 **211555-06-5P**, WHI-P 111
211555-07-6P, WHI-P 132 **211555-08-7P**, WHI-P180
211555-09-8P, WHI-P 197 **251376-04-2P**, WHI-P 292
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)

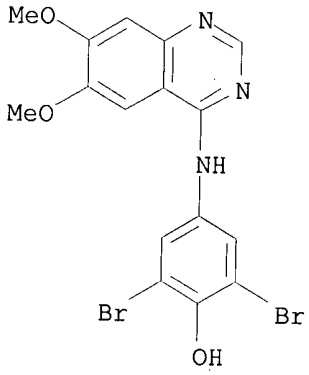
RN 21561-09-1 HCAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-phenyl- (9CI) (CA INDEX NAME)



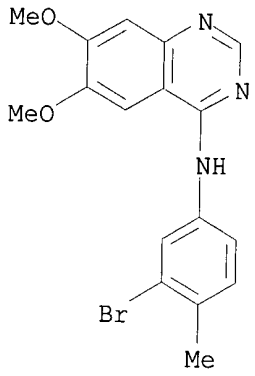
RN 153436-54-5 HCAPLUS
CN 4-Quinazolinamine, N-(3-bromophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



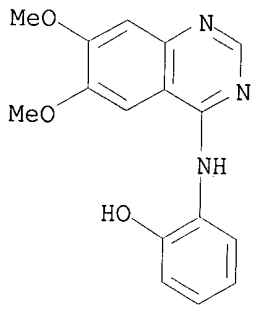
RN 211555-05-4 HCAPLUS
CN Phenol, 2,6-dibromo-4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



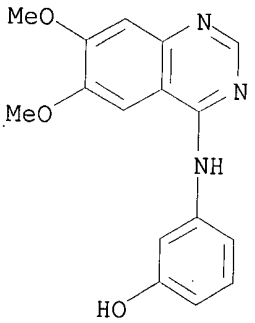
RN 211555-06-5 HCAPLUS
CN 4-Quinazolinamine, N-(3-bromo-4-methylphenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



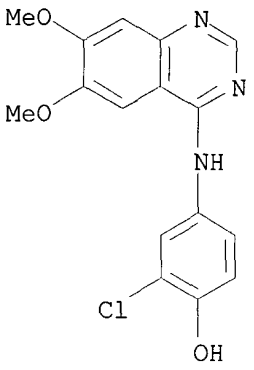
RN 211555-07-6 HCAPLUS
CN Phenol, 2-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



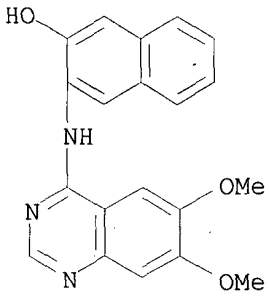
RN 211555-08-7 HCAPLUS
CN Phenol, 3-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



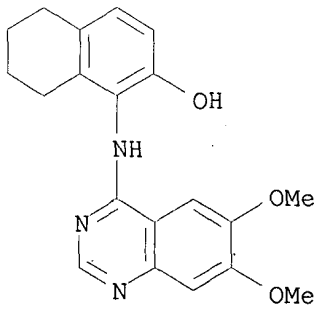
RN 211555-09-8 HCAPLUS
CN Phenol, 2-chloro-4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



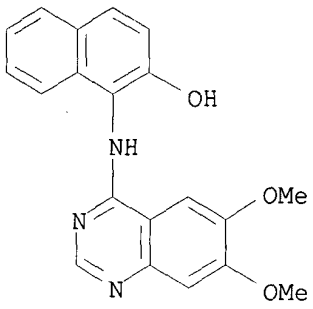
RN 251376-04-2 HCAPLUS
CN 2-Naphthalenol, 3-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



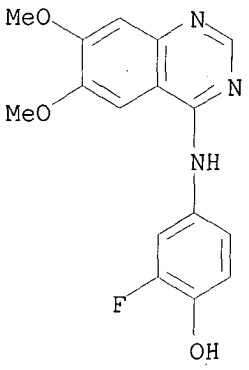
IT **251347-48-5 251347-49-6 251347-50-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(quinazoline derivs., prepn., conjugates, and use for treating **brain tumors**)
RN 251347-48-5 HCAPLUS
CN 2-Naphthalenol, 1-[(6,7-dimethoxy-4-quinazolinyl)amino]-5,6,7,8-tetrahydro- (9CI) (CA INDEX NAME)



RN 251347-49-6 HCAPLUS
CN 2-Naphthalenol, 1-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



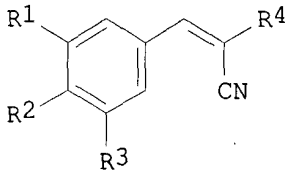
RN 251347-50-9 HCAPLUS
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]-2-fluoro- (9CI) (CA INDEX NAME)



L92 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:718981 HCAPLUS
DN 131:322425
TI Preparation of phenylacrylonitriles, quinoxalines, quinazolines, and related compounds as modulators of tyrosine kinase signal transduction
IN App, Harald; McMahon, Gerald M.; Tang, Peng Cho; Gazit, Aviv; Levitzki, Alexander
PA Yissum Research Development Company of the Hebrew University of Jerusalem, Israel; Sugen, Inc.
SO U.S., 21 pp., Cont.-in-part of U.S. 5,712,395.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K031-275
ICS A61K031-40; A61K031-415; C07C317-28
NCL 514419000
CC 25-20 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1, 28
FAN.CNT 7

	PATENT NO.	KIND	DATE		APPLICATION NO.	DATE	
PI	US 5981569	A	19991109		US 1995-463247	19950605	<--
	CA 2149298	AA	19940526		CA 1993-2149298	19931115	<--
	US 6177401	B1	20010123		US 1994-193829	19940209	<--
	US 5712395	A	19980127		US 1995-386021	19950209	<--
PRAI	US 1992-975750	B2	19921113	<--			
	US 1993-38596	B2	19930326	<--			
	US 1994-193829	A2	19940209	<--			

US 1995-386021 A2 19950209 <--
OS MARPAT 131:322425
GI



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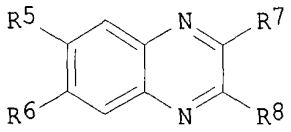
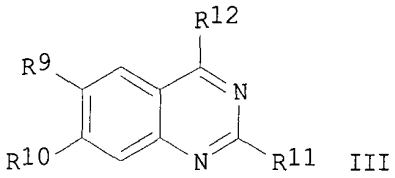


II



III

AB Title compds., e.g., [I, II, III; R1 = Me2CH, Me3C, iodo, Br, OH, Me; R2 = OH; R3 = Me2CH, Me3C, OH, H, Me; R4 = 1-phenyl-n-propylaminocarbonyl, (E)-1-cyano-2-[(3,5-diisopropyl-4-hydroxy)phenyl]ethenylsulfonyl, aminothiocarbonyl, cyanomethylsulfonyl, (3-amino-4-cyano)pyrazol-4-yl, etc.; R5, R6 = H, Me; R7 = H, CHO, Cl; R8 = Ph, 3,4-dihydroxyphenyl, 4-iodophenylamino, 3-chlorophenylamino, etc.; R9 = H, Me, OMe; R10 = H, OMe; R11 = H, Cl; R12 = 3-chlorophenylamino, 4-methylphenylmercapto, 4-iodophenylamino, 3-hydroxyphenylamino], were prepd. as modulators of KDR/FLK-1 receptor signal transduction useful to regulate and/or modulate vasculogenesis and angiogenesis. Thus, 3,5-di-tert-butyl-4-hydroxybenzaldehyde, thiocyanoacetamide, and .beta.-alanine were refluxed 6 h in EtOH to give (E)-2-aminothiocarbonyl-3-(3,5-di-tert-butyl-4-hydroxyphenyl)acrylonitrile. The latter showed IC50 = 0.8 .mu.M in an in vitro FLK-1R ELISA assay.

ST phenylacrylonitrile quinoxaline quinazoline prepn tyrosine kinase signal transduction modulator; anticancer phenylacrylonitrile quinoxaline quinazoline; antidiabetic phenylacrylonitrile quinoxaline quinazoline; KDR FLK1 receptor signal transduction modulator phenylacrylonitrile quinoxaline quinazoline; vasculogenesis modulator phenylacrylonitrile quinoxaline quinazoline; angiogenesis modulator phenylacrylonitrile quinoxaline quinazoline

IT **Sarcoma**
(Kaposi's, treatment; prepn. of phenylacrylonitriles and related compds. as modulators of tyrosine kinase signal transduction)

IT Intestine, neoplasm
(colon, treatment; prepn. of phenylacrylonitriles and related compds. as modulators of tyrosine kinase signal transduction)

IT Eye, disease
(diabetic retinopathy, treatment; prepn. of phenylacrylonitriles and related compds. as modulators of tyrosine kinase signal transduction)

IT **Neuroglia**
(glioma, treatment; prepn. of phenylacrylonitriles and related compds. as modulators of tyrosine kinase signal transduction)

IT Blood vessel, neoplasm
(hemangioma, treatment; prepn. of phenylacrylonitriles and related compds. as modulators of tyrosine kinase signal transduction)

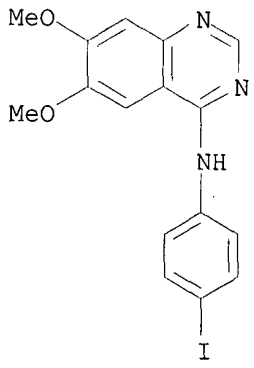
IT Angiogenesis
(modulators; prepn. of phenylacrylonitriles and related compds. as

modulators of tyrosine kinase signal transduction)
IT Prostate gland
(neoplasm, treatment; prepn. of phenylacrylonitriles and related compds. as modulators of tyrosine kinase signal transduction)
IT Antidiabetic agents
Antitumor agents
(prepn. of phenylacrylonitriles and related compds. as modulators of tyrosine kinase signal transduction)
IT Vascular endothelial growth factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(prepn. of phenylacrylonitriles and related compds. as modulators of tyrosine kinase signal transduction)
IT Lung, neoplasm
Melanoma
Ovary, neoplasm
Pancreas, neoplasm
Skin, neoplasm
(treatment; prepn. of phenylacrylonitriles and related compds. as modulators of tyrosine kinase signal transduction)
IT 133550-18-2P 140674-76-6P 140674-77-7P 148741-30-4P 148741-31-5P
155566-32-8P 168835-80-1P 168835-82-3P 168835-83-4P 168835-85-6P
168835-87-8P 168835-88-9P 168835-89-0P 168835-90-3P
168835-91-4P 168835-92-5P 168835-93-6P
168835-94-7P 168835-95-8P **168835-96-9P** 168835-97-0P
168835-98-1P 168836-00-8P 168836-01-9P 168836-02-0P 169120-56-3P
170448-92-7P 211370-16-0P 249296-58-0P **249296-59-1P**
249296-66-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of phenylacrylonitriles and related compds. as modulators of tyrosine kinase signal transduction)
IT 75-12-7, Formamide, reactions 95-76-1, 3,4-Dichloroaniline 99-40-1
100-46-9, Benzylamine, reactions 106-40-1, p-Bromoaniline 106-45-6,
p-Thiocresol 107-95-9, .beta.-Alanine 108-42-9 109-77-3,
Malononitrile 123-08-0, 4-Hydroxybenzaldehyde 139-85-5,
3,4-Dihydroxybenzaldehyde 298-12-4, Glyoxylic acid 491-36-1,
4-Quinazolone 540-37-4, p-Iodoaniline 591-27-5 626-01-7,
3-Iodoaniline 771-97-1, 2,3-Diaminonaphthalene 1074-12-0,
Phenylglyoxal 1194-98-5, 2,5-Dihydroxybenzaldehyde 1196-69-6,
5-Formylindole 1620-98-0, 3,5-Di-tert-butyl-4-hydroxybenzaldehyde
1960-77-6 2078-54-8, 2,6-Diisopropylphenol 2740-81-0, 2-Chlorophenyl
isothiocyanate 2941-78-8, 5-Methyl-2-aminobenzoic acid 3171-45-7,
4,5-Dimethyl-1,2-diaminobenzene 3216-88-4 5438-36-8, 5-Iodovanillin
5653-40-7, 4,5-Dimethoxy-2-aminobenzoic acid 7357-70-2 10412-93-8,
N-Benzylcyanoacetamide 10537-86-7 16414-34-9, 5-Bromo-3,4-dihydroxybenzaldehyde 28888-44-0, 6,7-Dimethoxy-2,4-quinazolinedione
37463-94-8 54711-21-6 58421-79-7, 4-Chloro-6-methylquinazoline
70071-08-8 93071-65-9, Methyl 3-aminomethylbenzoate 111233-69-3
133550-33-1 133550-57-9 168836-05-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of phenylacrylonitriles and related compds. as modulators of tyrosine kinase signal transduction)
IT 5190-68-1P 13790-39-1P 13794-72-4P 19181-53-4P 27389-84-0P
27631-29-4P 28082-82-8P 29067-81-0P 168835-79-8P 170449-31-7P
170449-32-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of phenylacrylonitriles and related compds. as modulators of tyrosine kinase signal transduction)
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

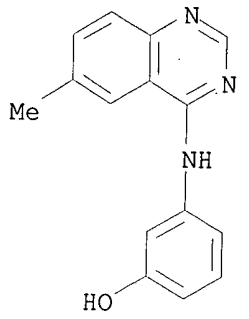
(1) Anon; DE 1135471 1962 HCAPLUS
(2) Anon; JP 55-167205 1980 HCAPLUS
(3) Anon; EP 322738 1989 HCAPLUS
(4) Anon; WO 9115495 1991 HCAPLUS
(5) Anon; EP 0520722 A1 1992 HCAPLUS
(6) Anon; WO 9203459 1992 HCAPLUS
(7) Anon; WO 9214748 1992 HCAPLUS
(8) Anon; WO 9217486 1992 HCAPLUS
(9) Anon; WO 9220642 1992 HCAPLUS
(10) Anon; WO 9221660 1992 HCAPLUS
(11) Anon; EP 0566226 A1 1993 HCAPLUS
(12) Anon; WO 9403427 1994 HCAPLUS
(13) Anon; WO 9410202 1994 HCAPLUS
(14) Anon; WO 9414808 1994 HCAPLUS
(15) Anon; WO 9426260 1994 HCAPLUS
(16) Anon; WO 9514464 1995 HCAPLUS
(17) Anon; WO 9519169 1995 HCAPLUS
(18) Anon; WO 9521613 1995 HCAPLUS
(19) Cho; US 5063243 1991 HCAPLUS
(20) Dell; US 5281619 1994 HCAPLUS
(21) Eissenstat; US 5330992 1994 HCAPLUS
(22) Gazit, A; J Med Chem 1993, V36, P3556 HCAPLUS
(23) Gazit, A; Journ Med Chem 1991, V34, P1896 HCAPLUS
(24) Green; US 5124354 1992 HCAPLUS
(25) Kokosi, J; 1990 HCAPLUS
(26) Levitzki; US 5217999 1993 HCAPLUS
(27) Mazumder; Biochemistry 1995, V34(46), P15111 HCAPLUS
(28) Merlin, J; Can J Chem 1985, V63, P1840 HCAPLUS
(29) Miyoshi, H; Biochimica et Biophysica Acta 1988, V935, P312 HCAPLUS
(30) Ohmichi; Biochemistry 1993, V32(17), P4650 HCAPLUS
(31) Ohmichi, M; Biochemistry 1993, V32, P4650 HCAPLUS
(32) Posner; Molecular Pharmacology 1994, V45(4), P673 HCAPLUS
(33) Spada; US 5302606 1994 HCAPLUS
(34) Vallee; US 4966849 1990 HCAPLUS
(35) Yaish; Science 1988, V242(4880), P933 HCAPLUS

IT **168835-91-4P 168835-92-5P 168835-94-7P**
168835-96-9P 249296-59-1P 249296-66-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of phenylacrylonitriles and related compds. as modulators of tyrosine kinase signal transduction)

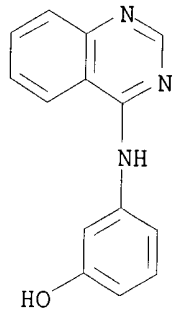
RN 168835-91-4 HCAPLUS
CN 4-Quinazolinamine, N-(4-iodophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



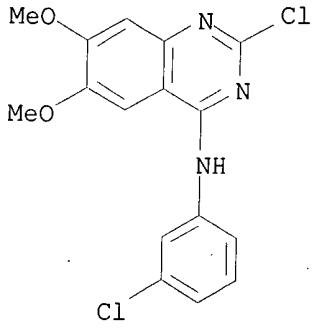
RN 168835-92-5 HCAPLUS
CN Phenol, 3-[(6-methyl-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



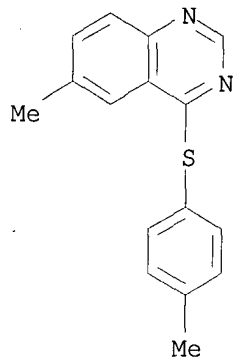
RN 168835-94-7 HCAPLUS
CN Phenol, 3-(4-quinazolinylamino)- (9CI) (CA INDEX NAME)



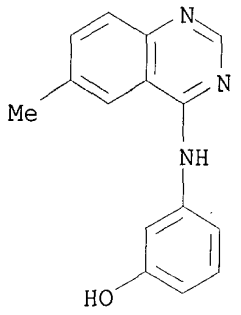
RN 168835-96-9 HCAPLUS
CN 4-Quinazolinamine, 2-chloro-N-(3-chlorophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 249296-59-1 HCAPLUS
CN Quinazoline, 6-methyl-4-[(4-methylphenyl)thio]- (9CI) (CA INDEX NAME)



RN 249296-66-0 HCAPLUS
CN Phenol, 3-[(6-methyl-4-quinazolinyl)amino]-, hydrochloride (9CI) (CA INDEX NAME)



●x HCl

L92 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:659226 HCAPLUS
DN 131:281600
TI Methods and compositions for reducing UV-induced inhibition of collagen synthesis in human skin
IN Fisher, Gary J.; Voorhees, John J.
PA The Regents of the University of Michigan, USA
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-20
ICS A61K031-12; A61K031-235; A61K031-35; A61K031-17
CC 1-12 (Pharmacology)
Section cross-reference(s): 62, 63
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9951220	A1	19991014	WO 1999-US7267	19990402 <--

W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,

ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2326507	AA	19991014	CA 1999-2326507	19990402	<--
AU 9936374	A1	19991025	AU 1999-36374	19990402	<--
AU 740569	B2	20011108			
BR 9909899	A	20001226	BR 1999-9899	19990402	<--
EP 1067920	A1	20010117	EP 1999-918456	19990402	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2002510621	T2	20020409	JP 2000-541991	19990402	<--
PRAI US 1998-80437P	P	19980402 <--			
WO 1999-US7267	W	19990402			

AB Exposure of human skin to UV (UV) radiation from the sun not only induces the prodn. of enzymes (matrix metalloproteinases) that degrade collagen, but also inhibits the synthesis of new collagen by inhibiting the synthesis of procollagen. This UV-induced inhibition of the synthesis of collagen can be prevented by the topical application of a retinoid or **c-JUN** inhibitor to the skin prior to its exposure to UV radiation. It was shown that retinoids such as retinoic acid protect human skin in vivo against the UV-induced inhibition of collagen synthesis.

ST UV inhibition collagen synthesis retinoid

IT Ionophores
(antagonists; retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

IT G proteins (guanine nucleotide-binding proteins)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antagonists; retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

IT Transcription factors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**c-jun**; retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

IT Collagens, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(procollagens; retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

IT Antioxidants
Skin
Sunscreens
UV radiation
(retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

IT Collagens, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

IT Retinoids
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

IT Drug delivery systems
(topical; retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

IT 62229-50-9, Egf
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antagonists; retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

IT 100324-81-0, Lisofylline 152121-30-7, SB202190 167869-21-8, PD98059
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(**c-JUN** inhibitor; retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

IT 37277-79-5, Geranyltransferase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitor; retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

IT 145-63-1, Suramin 446-72-0, Genistein 2826-26-8, Tyrphostin 1 118409-57-7, Tyrphostin 23 118409-59-9, Tyrphostin 46 118409-60-2, Tyrphostin 47 125697-92-9, Lavendustin A 126433-07-6, Tyrphostin 51 133550-35-3, AG-494 **153436-54-5**, PD 153035
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ionophore or G-protein or EGF receptor antagonist; retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

IT 100827-28-9D, Erbstatin, analogs
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ionophore or G-protein or EGF receptor antagonists; retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

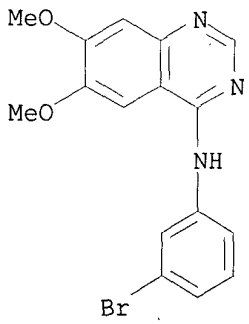
IT 68-26-8, Retinol 302-79-4, Retinoic acid
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

IT 5466-77-3, 2-Ethylhexyl p-methoxycinnamate 70356-09-1, 4-tert-Butyl-4'-methoxydibenzoylmethane
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sunscreen; retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Habif; US 5690947 A 1997 HCAPLUS
(2) Kligman; US 5051449 A 1991 HCAPLUS
(3) Murray; US 4810489 A 1989 HCAPLUS
(4) Wei; US 5824702 A 1998 HCAPLUS

IT **153436-54-5**, PD 153035
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ionophore or G-protein or EGF receptor antagonist; retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

RN 153436-54-5 HCAPLUS
CN 4-Quinazolinamine, N-(3-bromophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



L92 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:534888 HCAPLUS
DN 129:156926
TI Methods and compositions using receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders, and inhibitor preparation
IN Chen, Hui; Gazit, Aviv; Hirth, Klaus Peter; Mann, Elaina; Shawver, Laura

K.; Tsai, Jianming; Tang, Peng Cho
PA Sugen, Inc., USA; Yissum Research & Development Company of the Hebrew University of Jerusalem
SO U.S., 41 pp., Cont.-in-part of U.S. Ser. No. 207,933, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM A01N043-40
ICS C07D211-72
NCL 514352000
CC 1-6 (Pharmacology)
Section cross-reference(s): 25, 28, 63
FAN.CNT 2

	PATENT NO.	KIND	DATE		APPLICATION NO.	DATE	
PI	US 5789427	A	19980804		US 1995-399967	19950307	<--
	US 5773476	A	19980630		US 1995-486775	19950607	<--
PRAI	US 1994-207933		19940307	<--			
	US 1995-399967		19950307	<--			

OS MARPAT 129:156926
AB The invention concerns compds. and their use to inhibit the activity of a receptor tyrosine kinase. The invention is preferably used to treat cell proliferative disorders, e.g. cancers characterized by over-activity or inappropriate activity HER2 or EGFR.
ST receptor tyrosine kinase inhibitor prepn antiproliferative; antitumor receptor tyrosine kinase inhibitor prepn; HER2 EGFR kinase inhibitor antiproliferative antitumor
IT Animal cell line
(A431; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)
IT Ovary, neoplasm
Salivary gland
Salivary gland
Salivary gland
Stomach, neoplasm
Stomach, neoplasm
(adenocarcinoma, inhibitors; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)
IT Mammary gland
(carcinoma, inhibitors; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)
IT Receptors
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(chimeric, EGFR-HER2; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)
IT Intestine, neoplasm
Intestine, neoplasm
(colorectal, inhibitors; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)
IT **Antitumor agents**
Antitumor agents
(colorectal; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)
IT Uterus, neoplasm
Uterus, neoplasm
(endometrium, inhibitors; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)
IT **Antitumor agents**
Antitumor agents
(endometrium; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT **Antitumor agents**
Antitumor agents
(gastric adenocarcinoma; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT **Neuroglia**
(**glioblastoma**, inhibitors; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT **Antitumor agents**
(**glioblastoma**; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT Ovary, neoplasm
Stomach, neoplasm
(inhibitors; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT **Antitumor agents**
(mammary gland carcinoma; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT **Antitumor agents**
(ovary adenocarcinoma; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT **Antitumor agents**
(ovary; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT Proliferation inhibition
(proliferation inhibitors; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT **Antitumor agents**
Cytotoxic agents
Drug delivery systems
(receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT Epidermal growth factor receptors
Growth factor receptors
neu (receptor)
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT Platelet-derived growth factor receptors
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT **Antitumor agents**
(salivary gland adenocarcinoma; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT **Antitumor agents**
(stomach; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT 1960-77-6P 5190-68-1P, 4-Chloroquinazoline 10537-86-7P, 3,5-Diisopropyl-4-hydroxybenzaldehyde 19181-54-5P 27389-84-0P 29634-62-6P 170449-31-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT 93-91-4, Benzoyl acetone 94-02-0, Ethyl benzoyl acetate 98-16-8 99-40-1 100-46-9, Benzylamine, reactions 103-79-7, Phenyl acetone 105-34-0, Methyl cyanoacetate 108-42-9, 3-Chloroaniline 109-76-2, 1,3-Propanediamine 109-77-3, Malononitrile 109-80-8,

1,3-Propanedithiol 120-46-7, Dibenzoyl methane 123-54-6, 2,4-Pentanedione, reactions 139-85-5, 3,4-Dihydroxybenzaldehyde 480-96-6, Benzofuroxane 485-47-2, Ninhydrin 491-36-1, 4-Quinazolinone 579-07-7 868-54-2, Malononitrile dimer 1075-06-5, Phenyl glyoxal hydrate 1194-98-5, 2,5-Dihydroxybenzaldehyde 1620-98-0, 3,5-Di-tert-butyl-4-hydroxybenzaldehyde 2038-57-5, 3-Phenylpropylamine 2078-54-8, 2,6-Diisopropylphenol 2423-66-7 2941-78-8, 5-Methyl-2-aminobenzoic acid 3171-45-7 4389-45-1, 2-Amino-3-methylbenzoic acid 4518-10-9 5348-42-5, 4,5-Dichloro-1,2-phenylenediamine 5438-36-8, 5-Iodovanillin 7357-70-2 10412-93-8, N-Benzylcyanoacetamide 13790-39-1, 4-Chloro-6,7-dimethoxyquinazoline 14268-66-7, 3,4-Methylenedioxyaniline 16414-34-9, 3,4-Dihydroxy-5-bromobenzaldehyde 24522-30-3 27869-04-1 37463-94-8 40018-25-5, 2-Chlorobenzoylacetonitrile 54711-21-6 58421-79-7, 4-Chloro-6-methylquinazoline 74908-81-9 133550-33-1 138942-61-7 168835-79-8 170449-33-9 170449-34-0, 2-Pyridinesulfonylacetonitrile
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT 79079-06-4, EGF receptor tyrosine kinase 127407-08-3, Receptor tyrosine kinase 137632-09-8, HER2 kinase
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT 101463-26-7
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT 13494-38-7P 65224-45-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT 555-60-2P 5023-53-0P 5784-78-1P 6639-86-7P 10537-47-0P 13297-17-1P 15034-21-6P 23190-84-3P 40114-83-8P 54259-09-5P 57859-60-6P 70071-08-8P 71896-95-2P **88404-44-8P** 140674-76-6P **146871-70-7P** 148741-30-4P 148741-31-5P 148741-32-6P **153436-53-4P** 168835-82-3P 168835-87-8P 170448-89-2P 170448-90-5P 170448-91-6P 170448-92-7P 170449-00-0P 170449-12-4P 170449-13-5P **170449-14-6P 170449-15-7P 170449-16-8P 170449-17-9P 170449-18-0P 170449-19-1P 170449-20-4P** 170449-21-5P 170449-22-6P 170449-23-7P 170449-24-8P 170449-25-9P 211298-73-6P 211298-75-8P 211298-81-6P 211298-83-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT 65678-07-1 133550-41-1 170448-88-1 170448-95-0 170448-97-2 170448-98-3 170448-99-4 170449-02-2 170449-03-3 170449-04-4 170449-05-5 170449-06-6 170449-07-7 170449-08-8 170449-11-3 170449-26-0 170449-27-1 170449-28-2 170449-29-3 170449-30-6 186581-94-2 186581-95-3 186581-96-4 211299-44-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

IT 15762-68-2P 19181-53-4P, 6-Methyl-4-quinazolinone 58421-80-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

RE.CNT 90 THERE ARE 90 CITED REFERENCES AVAILABLE FOR THIS RECORD

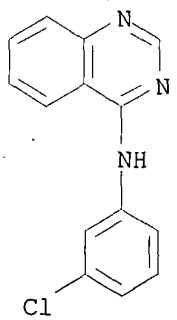
RE

(1) Aaronson, S; Science 1991, V254, P1146 HCAPLUS
(2) Affleck; Proc Annun Meeting American Associate Cancer Research 1993, V34, PA2298
(3) Anafi; J Bio Chem 1992, V267, P4518 HCAPLUS
(4) Andrews; J American Veterinary Medicine Association 1993, V202(2), P229
(5) Anon; GB 1191306 1970 HCAPLUS
(6) Anon; GB 2240104 1991 HCAPLUS
(7) Anon; EP 0520722 1992 HCAPLUS
(8) Anon; CA 2069857 1992 HCAPLUS
(9) Anon; WO 9202444 1992
(10) Anon; WO 9203736 1992 HCAPLUS
(11) Anon; EP 0537742 1993 HCAPLUS
(12) Anon; EP 0566226 1993 HCAPLUS
(13) Anon; AU 3101093 1993
(14) Anon; WO 9426260 1994 HCAPLUS
(15) Anon; WO 9524190 1995 HCAPLUS
(16) Baselga; J of Natl Cancer Institute 1993, V85(16), P1327 HCAPLUS
(17) Bilder; Am J Physiol, Cell Physiol 29 1991, V260, PC721 HCAPLUS
(18) Birchall; 1978 HCAPLUS
(19) Bryckaert; Exp Cell Research 1992, V199, P255 HCAPLUS
(20) Caraglia; Cancer Immunol Immunother 1993, V37, P150 HCAPLUS
(21) Carboni; J Am Chem Soc 1958, V80, P2838 HCAPLUS
(22) Carraway; Cell 1994, V78, P5 HCAPLUS
(23) Carraway; J Biol Chem 1994, V269, P14303 HCAPLUS
(24) Dati; Oncogene 1990, V5, P1001 HCAPLUS
(25) Decker; J Immunol Methods 1988, V15, P61
(26) Dougall; Oncogene 1994, V9, P2109 HCAPLUS
(27) Dressler; US 3313771 1967 HCAPLUS
(28) Ferris; J Org Chem 1979, V44(2), P173 HCAPLUS
(29) Floege; Kidney International 1993, V43S, P47
(30) Gazit; J Med Chem 1989, V32, P2344 HCAPLUS
(31) Gazit; J Med Chem 1993, V36, P3556 HCAPLUS
(32) Gazit; J Med- Chem 1991, V34, P1896 HCAPLUS
(33) Gottardis; J Steriod Biochem 1988, V30(1-6), P331
(34) Hale; J Clin Pathol 1993, V46, P149 MEDLINE
(35) Harris; New England J of Medicine 1992, V327(5), P319 MEDLINE
(36) Hoekstra; Experimental Therapeutics from 84th Annual Meeting of American Association for Cancer Research 1993, V34(2455)
(37) Honegger; Cell 1987, V5, P199
(38) Hudziak; Molecular and Cellular Biology 1989, V9, P1165 HCAPLUS
(39) Issidorides; J Org Chem 1966, V31, P4067 HCAPLUS
(40) Karameris; Path Res Pract 1993, V189, P133 MEDLINE
(41) Koenders; Breast Cancer Research and Treatment 1993, V25, P21 MEDLINE
(42) Korzeniewski; J Immunol Methods 1983, V64, P313 HCAPLUS
(43) Lee; J Org Chem 1975, V40(24), P3608 HCAPLUS
(44) Levitzki; US 5217999 1993 HCAPLUS
(45) Levitzki, A; Biochem Pharm 1990, V40(5), P913 HCAPLUS
(46) Ley; Synthesis 1975, V1975, P415
(47) Lotta, T; Journal of Computer-Aided Molecular Design 1992, V6, P253 HCAPLUS
(48) Lyall; J Bio Chem 1989, V264, P14503 HCAPLUS
(49) Marshall, E; Science 1993, V259, P618 MEDLINE
(50) Mitus; Textbook of Clinical Oncology P410
(51) Mosmann; J Immunol Methods 1983, V65, P55 MEDLINE
(52) Ohmichi; Biochemistry 1993, V32, P4650 HCAPLUS

(53) Osborne; Cancer Research 1985, V45, P584 HCAPLUS
(54) Osherov; J Bio Chem 1993, V268, P11134 HCAPLUS
(55) Osherov; J Cell Biochem 1993, VS17A, P237
(56) Ozzello; Eur J Cancer 1980, V16, P553 MEDLINE
(57) O'Rourke; Clinical Oncology
(58) Pawson; Current Biology 1993, V3(7), P434 HCAPLUS
(59) Peterson; The Prostate 1993, V22, P335 HCAPLUS
(60) Pigott; Brit J of Neurosurgery 1993, V7, P261 MEDLINE
(61) Plowman; Nature 1993, V366, P473 HCAPLUS
(62) Pui; Textbook of Clinical Oncology P433
(63) Reddy; Cancer Research 1992, V52, P3636 HCAPLUS
(64) Rendu; Biochem Pharm 1992, V44(5), P881 HCAPLUS
(65) Rubens; Cancer Surveys 1993, V18, P199 MEDLINE
(66) Rusch; Cancer Research 1993, V53, P2379 HCAPLUS
(67) Rygaard; Acta path microbiol scand 1969, V77, P758 MEDLINE
(68) Samanta; Proc natl Acad Sci USA 1994, V91, P1711 HCAPLUS
(69) Sammes; J Chem Soc 1971, P2151 HCAPLUS
(70) Sarup; Growth Regulation 1991, V1, P72 MEDLINE
(71) Schlessinger; Neuron 1992, V9, P383 HCAPLUS
(72) Schlessinger, J; Trends Biochem Sci 1988, V13, P443 HCAPLUS
(73) Schornagel; Biochem Pharm 1984, V33(200), P3251
(74) Scott; J Bio Chem 1991, V266(22), P14300 HCAPLUS
(75) Seibert; Cancer Research 1983, V43, P2223 HCAPLUS
(76) Shafie; J Natl Cancer Institute 1981, V67(1), P51 HCAPLUS
(77) Shepard; Journal of Clinical Immunology 1991, V11, P117 HCAPLUS
(78) Skehan; J Natl Cancer Inst 1990, V82, P1107 HCAPLUS
(79) Slamon; Science 1987, V235, P177 HCAPLUS
(80) Sliwkowski; J Biol Chem 1994, V269, P14661 HCAPLUS
(81) Spada; US 5302606 1994 HCAPLUS
(82) Stein; EMBO Journal 1994, V13(6), P1331 HCAPLUS
(83) Ullrich; Cell 1990, V61, P203 HCAPLUS
(84) Wada; Cell 1990, V61, P1339 HCAPLUS
(85) Wada; Oncogene 1990, V5, P489 HCAPLUS
(86) Warri; Int J Cancer 1991, V49, P616 HCAPLUS
(87) Yaish; Science 1988, V242, P933 HCAPLUS
(88) Yarden; Ann Rev Biochem 1988, V57, P443 HCAPLUS
(89) Yoneda; Cancer Research 1991, V51, P4430 HCAPLUS
(90) Zeillinger; Clin Biochem 1993, V26, P221 MEDLINE

IT **88404-44-8P 146871-70-7P 153436-53-4P 170449-14-6P 170449-15-7P 170449-16-8P 170449-17-9P 170449-18-0P 170449-19-1P 170449-20-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(receptor tyrosine kinase inhibitors, and prepn. thereof, for inhibiting cell proliferative disorders)

RN 88404-44-8 HCAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)- (9CI) (CA INDEX NAME)



RN 146871-70-7 HCAPLUS
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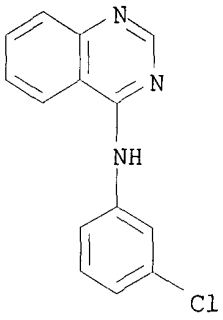

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RN 153436-53-4 HCAPLUS
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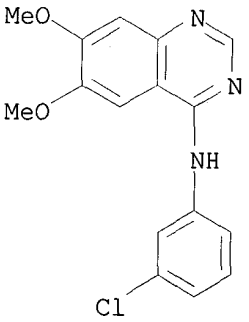
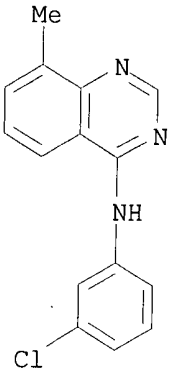


RN 170449-14-6 HCAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-8-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 170449-15-7 HCAPLUS
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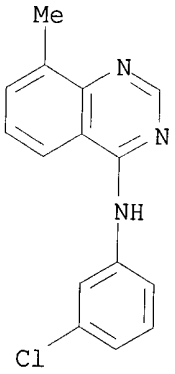

RN 170449-16-8 HCAPLUS
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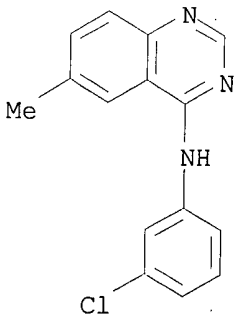

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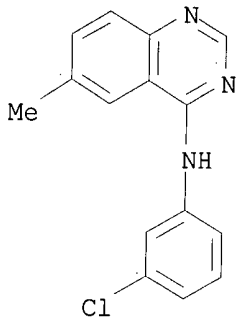
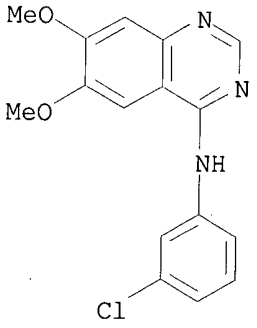
RN 170449-17-9 HCAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-6-methyl- (9CI) (CA INDEX NAME)



RN 170449-18-0 HCAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-6,7-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 170449-19-1 HCAPLUS
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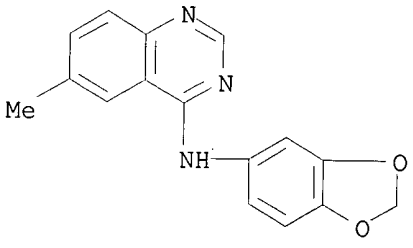

● HCl

RN 170449-20-4 HCAPLUS
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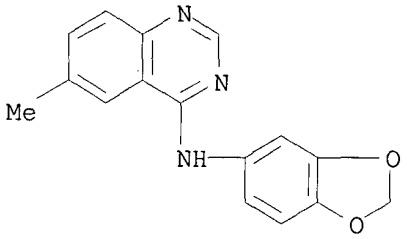


L92 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:401227 HCAPLUS
DN 129:170172
TI 4-(3'-Bromo-4'hydroxylphenyl)-amino-6,7-dimethoxyquinazoline: a novel quinazoline derivative with potent cytotoxic activity against human **glioblastoma** cells
AU Narla, Rama Krishna; Liu, Xing-Ping; Myers, Dorothea E.; **Uckun, Fatih M.**
CS Department of Experimental Oncology, **Hughes** Institute, St. Paul, MN, 55113, USA
SO Clinical Cancer Research (**1998**), 4(6), 1405-1414
CODEN: CCREF4; ISSN: 1078-0432
PB American Association for Cancer Research
DT Journal
LA English
CC 1-6 (Pharmacology)
AB The novel quinazoline deriv. 4-(3'-bromo-4'-hydroxylphenyl)-amino-6,7-dimethoxyquinazoline (WHI-P154) exhibited significant cytotoxicity against U373 and U87 human **glioblastoma** cell lines, causing apoptotic cell death at micromolar concns. The in vitro **antiglioblastoma** activity of WHI-P154 was amplified >200-fold and rendered selective by conjugation to recombinant human epidermal growth factor (EGF). The EGF-P154 conjugate was able to bind to and enter target **glioblastoma** cells within 10-30 min via receptor (R)-mediated endocytosis by inducing internalization of the EGF-R mols. In vitro treatment with EGF-P154 resulted in killing of **glioblastoma** cells at nanomolar concns. with an IC50 of 813 .+-. 139 nM, whereas no cytotoxicity against EGF-R-neg. leukemia cells was obsd., even at concns. as high as 100 .mu.M. The in vivo administration of EGF-P154 resulted in delayed tumor progression and improved tumor-free survival in a severe combined immunodeficient mouse **glioblastoma** xenograft model. Whereas none of the control mice remained alive tumor-free beyond 33 days (median tumor-free survival, 19 days) and all control mice had tumors that rapidly progressed to reach an av. size of >500 mm3 by 58 days, 40% of mice treated for 10 consecutive days with 1 mg/kg/day EGF-P154 remained alive and free of detectable tumors for more than 58 days with a median tumor-free survival of 40 days. The tumors developing in the remaining 60% of the mice never reached a size >50 mm3. Thus, targeting WHI-P154 to the EGF-R may be useful in the treatment of **glioblastoma** multiforme.
ST quinazoline deriv WHIP154 **glioblastoma** antitumor
IT Drug targeting
(**glioblastoma** inhibition by quinazoline deriv. WHI-P154 targeting of EGF receptor)
IT Epidermal growth factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**glioblastoma** inhibition by quinazoline deriv. WHI-P154 targeting of EGF receptor)
IT **Neuroglia**
(**glioblastoma**, inhibitors; **glioblastoma** inhibition

by quinazoline deriv. WHI-P154 targeting of EGF receptor)

IT **Antitumor agents**
(**glioblastoma; glioblastoma** inhibition by quinazoline deriv. WHI-P154 targeting of EGF receptor)

IT 62229-50-9D, Epidermal growth factor, conjugates with quinazoline deriv.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(**glioblastoma** inhibition by quinazoline deriv. WHI-P154 targeting of EGF receptor)

IT **21561-09-1P 153436-54-5P** 202475-60-3P 211555-04-3P
211555-05-4P 211555-06-5P 211555-07-6P
211555-08-7P 211555-09-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**glioblastoma** inhibition by quinazoline deriv. WHI-P154 targeting of EGF receptor)

IT 13790-39-1P, 4-Chloro-6,7-dimethoxyquinazoline
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(**glioblastoma** inhibition by quinazoline deriv. WHI-P154 targeting of EGF receptor)

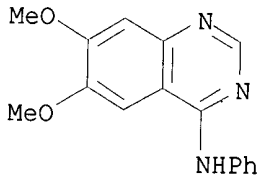
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

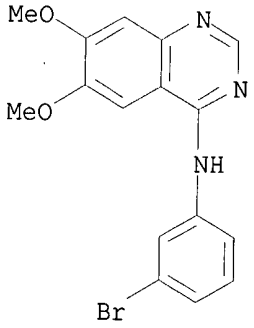
(1) Anderson, P; Cancer Res 1995, V55, P1321 HCAPLUS
(2) Bos, M; Clin Cancer Res 1997, V3, P2099 HCAPLUS
(3) Brandes, A; Cancer Invest 1996, V14, P551 HCAPLUS
(4) Covey, T; Rapid Commun Mass Spectrom 1988, V2, P249 HCAPLUS
(5) Feng, R; J Am Soc Mass Spectrom 1991, V2, P387 HCAPLUS
(6) Finlay, J; Pediatric Neuro-Oncology 1992, P278
(7) Friedman, S; Cancer Res 1995, V55, P2853
(8) Fry, D; Science (Washington DC) 1994, V265, P1093 HCAPLUS
(9) Hoi, S; J Neurosurg 1995, V82, P841
(10) Khazaie, K; Cancer Metastasis Rev 1993, V12, P255 HCAPLUS
(11) Maruno, M; J Neurosurg 1991, V75, P97 MEDLINE
(12) Mendelsohn, J; Biologic Therapy of Cancer:Principles and Practice 1995, P607
(13) Nomoto, F; Chem Pharm Bull 1990, V38, P1591
(14) Pardos, M; Cancer Medicine 1997, VI, P1471
(15) Pardos, M; Semin Surg Oncol 1998, V14, P88
(16) Thomas, C; Catalytic Processes and Proven Catalysts 1970, P1
(17) Torp, S; Cancer Immunol Immunother 1991, V33, P61 HCAPLUS
(18) Uckun, F; Clin Cancer Res 1998, V4, P1125 HCAPLUS
(19) Uckun, F; Clin Cancer Res 1998, V4, P901 HCAPLUS
(20) Uckun, F; J Clin Oncol 1997, V15, P2214 MEDLINE
(21) Uckun, F; Science (Washington DC) 1995, V267, P886 MEDLINE
(22) Waurzyniak, B; Clin Cancer Res 1997, V3, P881 HCAPLUS
(23) Yamazaki, H; Mol Cell Biol 1988, V8, P1816 HCAPLUS

IT **21561-09-1P 153436-54-5P 211555-05-4P**
211555-06-5P 211555-07-6P 211555-08-7P
211555-09-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**glioblastoma** inhibition by quinazoline deriv. WHI-P154 targeting of EGF receptor)

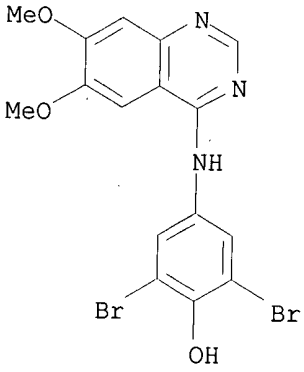
RN 21561-09-1 HCAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-phenyl- (9CI) (CA INDEX NAME)



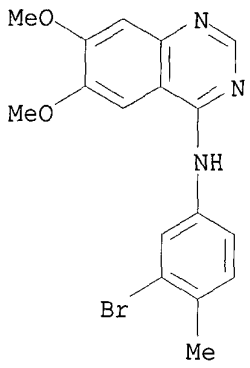
RN 153436-54-5 HCAPLUS
CN 4-Quinazolinamine, N-(3-bromophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 211555-05-4 HCAPLUS
CN Phenol, 2,6-dibromo-4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



RN 211555-06-5 HCAPLUS
CN 4-Quinazolinamine, N-(3-bromo-4-methylphenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



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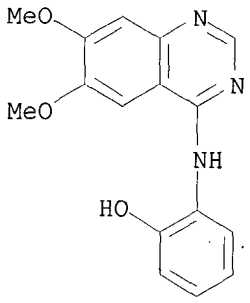
CN Phenol, 2-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



RN 211555-08-7 HCAPLUS
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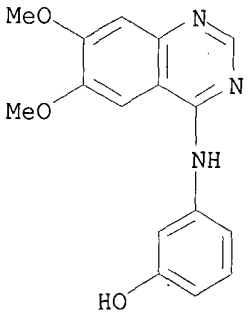

RN 211555-09-8 HCAPLUS
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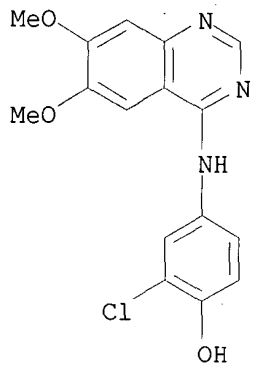

L92 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:265828 HCAPLUS
DN 128:294788
TI 4-Aminoquinazoline derivatives for treatment of hyperproliferative disorders or conditions in mammals
IN Arnold, Lee Daniel; Sobolov-Jaynes, Susan Beth
PA Pfizer Inc., USA
SO Eur. Pat. Appl., 33 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C07D403-12
ICS A61K031-505; C07D239-88; C07D401-14; C07D401-06
ICI C07D403-12, C07D239-00, C07D209-00
CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 837063	A1	19980422	EP 1997-307724	19971001 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
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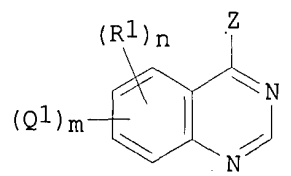
	JP 10152477	A2	19980609	JP 1997-284872	19971017 <--
	BR 9705088	A	19990720	BR 1997-5088	19971017 <--
PRAI	US 1996-28881P	P	19961017 <--		

OS MARPAT 128:294788
GI



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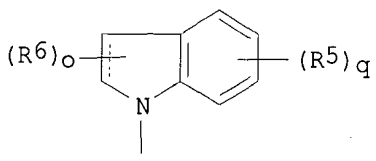

II

AB The title compds. I [R1 = CF3, halo, OH, etc.; Q1 = ArYX; Ar = monocyclic or bicyclic aryl or heteroaryl ring; X = C2 alkene, C2 alkyne or absent; Y = (CH2)p, wherein one or two of the CH2 groups may be replaced by either O, S, SO2, CO, NH or NMe; Z = NR3R4; R3 = H; R4 = Q2, Ph substituted by R5q, or NR3R4 = II, wherein the dotted line represents an optional double bond; m = 1, 2; n = 0, 1, 2, 3; o = 0, 1, 2; p= 0-5; q = 0-3 integer] and their pharmaceutically acceptable salts are prepd. Thus, heating (1H-indol-5-yl)-(6-iodo-7-methoxyquinazolin-4-yl)amine with

4-vinylpyridine, Pd acetate and NEt3 in MeCN gave (1H-indol-5-yl)-[7-methoxy-6-(2-pyridin-4-yl-vinyl)quinazolin-4-yl]amine.

ST hyperproliferative disorder aminoquinazoline deriv treatment; cancer aminoquinazoline deriv treatment; pyridinylvinyl quinazolinylamine prepn

IT **Neoplasm**
(aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Prostate gland
(benign hyperplasia; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT **Antitumor agents**
(bladder carcinoma; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT **Antitumor agents**
(**brain**; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Bladder
(carcinoma, inhibitors; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Esophagus
(disease, inhibitors; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT **Antitumor agents**
(head; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Skin, disease
(hyperplasia; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT **Brain, neoplasm**
Lung, neoplasm
Pancreas, neoplasm
Pancreas, neoplasm
Stomach, neoplasm
Thyroid gland, neoplasm
Thyroid gland, neoplasm
(inhibitors; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT **Antitumor agents**
(lung; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT **Antitumor agents**
(mammary gland; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT **Antitumor agents**
(neck; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT Head
Head
Mammary gland
Neck, anatomical
Neck, anatomical
(neoplasm, inhibitors; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT **Antitumor agents**
Antitumor agents
(pancreas; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT **Antitumor agents**
(stomach; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT **Antitumor agents**
Antitumor agents
(thyroid; aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT 206190-31-0P 206190-32-1P 206190-33-2P 206190-34-3P
206190-35-4P 206190-36-5P 206190-37-6P 206190-38-7P
206190-39-8P 206190-40-1P 206190-41-2P 206190-42-3P 206190-43-4P
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206190-70-7P 206190-72-9P 206190-74-1P 206190-76-3P 206190-79-6P
206190-82-1P 206190-84-3P 206190-86-5P 206190-89-8P 206190-91-2P
206190-95-6P 206190-96-7P 206190-99-0P 206191-02-8P 206191-03-9P
206191-05-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(aminoquinazoline derivs. for treatment of hyperproliferative diseases)

IT 98-80-6, Phenylboronic acid 100-43-6, 4-Vinylpyridine 109-04-6, 2-Bromopyridine 536-74-3, Ethynylbenzene 555-57-7 1066-54-2, Trimethylsilyl acetylene 1945-84-2, 2-Ethynylpyridine 5192-03-0, 5-Aminoindole 16064-08-7 50413-30-4 52537-00-5, 6-Chloroindoline 54060-30-9, 3-Ethynylaniline 55777-84-9, Bromoaniline 131379-16-3 157837-31-5 163105-90-6 183158-31-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(aminoquinazoline derivs. for treatment of hyperproliferative diseases)

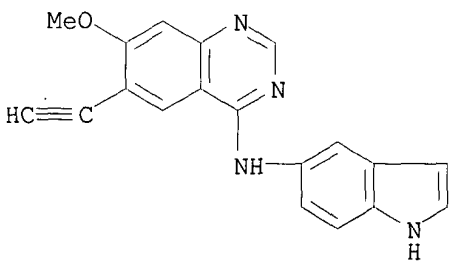
IT **206190-21-8P** 206190-25-2P **206190-26-3P** 206190-27-4P
206190-28-5P 206190-29-6P 206190-30-9P 206191-04-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(aminoquinazoline derivs. for treatment of hyperproliferative diseases)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
(1) Pfizer; WO 9523141 A HCAPLUS
(2) Pfizer; WO 9630347 A HCAPLUS
(3) Rhone-Poulenc Rorer International; WO 9220642 A HCAPLUS
(4) Rhone-Poulenc Rorer Pharmaceuticals; WO 9515758 A HCAPLUS
(5) The Wellcome Foundation; WO 9609294 A HCAPLUS
(6) Zeneca; EP 0566226 A HCAPLUS
(7) Zeneca; EP 0602851 A HCAPLUS
(8) Zeneca; EP 0635498 A HCAPLUS
(9) Zeneca; WO 9616960 A HCAPLUS

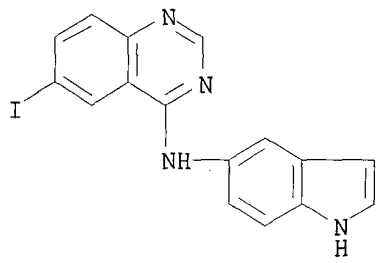
IT **206190-35-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(aminoquinazoline derivs. for treatment of hyperproliferative diseases)

RN 206190-35-4 HCAPLUS
CN 4-Quinazolinamine, 6-ethynyl-N-1H-indol-5-yl-7-methoxy- (9CI) (CA INDEX NAME)

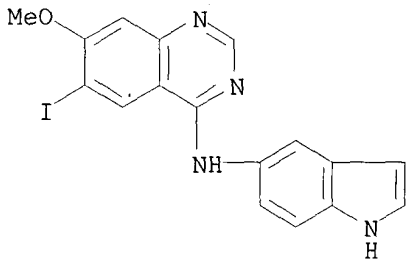


IT **206190-21-8P 206190-26-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(aminoquinazoline derivs. for treatment of hyperproliferative diseases)

RN 206190-21-8 HCAPLUS
CN 4-Quinazolinamine, N-1H-indol-5-yl-6-iodo- (9CI) (CA INDEX NAME)

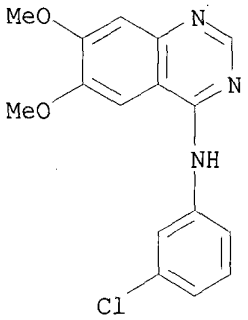


RN 206190-26-3 HCAPLUS
CN 4-Quinazolinamine, N-1H-indol-5-yl-6-iodo-7-methoxy- (9CI) (CA INDEX NAME)



L92 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 1996:530427 HCAPLUS
DN 125:185163
TI Tyrphostin AG 1478 preferentially inhibits human glioma expressing truncated rather than wild-type epidermal growth factor receptors
AU Han, Yuchun; Caday, Cornelio Gacusana; Nanda, Anil; Cavenee, Webster K.; Huang, H-J.
CS Biomedical Res. Inst., Louisiana State Univ. Med. Cent., Shreveport, LA, 71130, USA
SO Cancer Research (**1996**), 56(17), 3859-3861
CODEN: CNREA8; ISSN: 0008-5472
PB American Association for Cancer Research
DT Journal
LA English
CC 1-6 (Pharmacology)
AB The effects of a new epidermal growth factor receptor (EGFR) tyrosine kinase inhibitor, tyrphostin AG 1478, were tested on three related human glioma cell lines: U87MG, which expressed endogenous wild-type (wt.) EGFR, and two retrovirally infected U87MG cell populations which overexpressed either wt. (U87MG.wtEGFR) or truncated EGFR (U87MG..DELTA.EGFR). Although AG 1478 inhibited cell growth, DNA synthesis, EGFR tyrosine kinase activity, and receptor autophosphorylation of each cell line tyrosine kinase activity, and receptor autophosphorylation of each cell line in a dose-dependent manner, it was significantly more potent in U87MG..DELTA.EGFR cells than in the other two cell lines. The increased inhibitory response of U87MG..DELTA.EGFR cells was due to a greater sensitivity of the constitutively autophosphorylated Mr 140,000 and 155,000 .DELTA.EGFR species to AG 1478. These results suggest that AG 1478 is a relatively specific inhibitor of the .DELTA.EGFR, and this finding may have important therapeutic implications since the .DELTA.EGFR occurs frequently in **glioblastomas** and in breast, lung, and

ovarian cancers.
ST tyrphostin AG 1478 glioma EGF receptor
IT **Neoplasm inhibitors**
(tyrphostin AG 1478 preferentially inhibits human glioma expressing truncated rather than wild-type epidermal growth factor receptors)
IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(epidermal growth factor/.alpha.-transforming growth factor, gene c-erbB, tyrphostin AG 1478 preferentially inhibits human glioma expressing truncated rather than wild-type epidermal growth factor receptors)
IT **Neuroglia**
(neoplasm, tyrphostin AG 1478 preferentially inhibits human glioma expressing truncated rather than wild-type epidermal growth factor receptors)
IT Animal growth regulator receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha.-transforming growth factor gene c-erbB, tyrphostin AG 1478 preferentially inhibits human glioma expressing truncated rather than wild-type epidermal growth factor receptors)
IT **153436-53-4**, Tyrphostin AG 1478
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tyrphostin AG 1478 preferentially inhibits human glioma expressing truncated rather than wild-type epidermal growth factor receptors)
IT **153436-53-4**, Tyrphostin AG 1478
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tyrphostin AG 1478 preferentially inhibits human glioma expressing truncated rather than wild-type epidermal growth factor receptors)
RN 153436-53-4 HCAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



L92 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 1995:926425 HCAPLUS
DN 123:329984
TI Receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders
IN Chen, Hui; Gazit, Aviv; Hirth, Klaus Peter; Levitzki, Alex; Mann, Elaina; Shawver, Laura K.; Tsai, Jianming; Tang, Peng Cho
PA Sugen, Inc., USA; Yissum Research Development Co.
SO PCT Int. Appl., 121 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-275
ICS A61K031-495; C07C327-44; C07C311-13; C07C317-14; C07C255-34; C07D241-52
CC 1-6 (Pharmacology)

Section cross-reference(s): 7, 25

FAN.CNT 2

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PI	WO 9524190	A2	19950914	WO 1995-US2826	19950306 <--
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	RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
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PRAI	US 1994-207933		19940307 <--		
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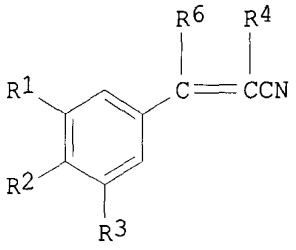
OS MARPAT 123:329984

GI



I

AB Receptor tyrosine kinase inhibitors I [R1-R3, R6 = alkyl, alkenyl, alkynyl, alkoxy, OH, amino, SH, alkylthio, halo, H, NO2, etc.; R4 = C(S)NHR5, C(O)NHR5, SO2YR5; Y = single bond, C(CN):CH:CH, azaalkyl; R5 = (substituted) aralkyl, CN] and II [R7-R10 = R1-R3 above; R12 = C(O)Me, C(S)Me, C(O)CF3, C(S)CF3; R13 = aryl, alkylaryl] are prepd. for use in treating cell proliferative disorders such as cancers characterized by overactivity or inappropriate activity of HER2 receptors or EGF receptors. Thus, I [R1, R2 = OH, R3 = I, R4 = C(O)NH(CH2)3Ph, R6 = H] (III) was prepd. in 2 steps by condensation of 5-iodovanillin with N-(3-phenylpropyl)cyanoacetamide. III inhibited EGF receptor kinase activity in EGC7 cells, HER2 kinase activity in BT-474 cells, and platelet-derived growth factor receptor kinase .beta. activity with an IC50 of 4, 18, and 35 .mu.M, resp., and inhibited growth of SKBR3 and SKOV3 cells in vitro at IC50 9 and 4.5 .mu.M, resp.

ST receptor tyrosine kinase inhibitor prepn cancer; protein tyrosine kinase inhibitor cell proliferation

IT **Neoplasm inhibitors**
Stomach, neoplasm
(receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)

IT Ovary, neoplasm
Stomach, neoplasm
(adenocarcinoma, receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)

IT Animal growth regulator receptors
Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(blood platelet-derived growth factor, overactivity of, neoplasm from; receptor tyrosine kinase inhibitors for inhibiting cell proliferative

disorders)
IT Uterus, neoplasm
(endometrium, receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)
IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(epidermal growth factor/.alpha.-transforming growth factor, gene c-erbB, receptor, protein tyrosine kinase of, inhibitors of; receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)
IT Intestine, neoplasm
(large, receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)
IT Mammary gland
(neoplasm, receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)
IT Salivary gland
(neoplasm, adenocarcinoma, receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)
IT Mammary gland
(neoplasm, carcinoma, receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)
IT **Neuroglia**
(neoplasm, **glioblastoma**, receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)
IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(p185c-erbB2, inhibitors; receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)
IT Animal growth regulator receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha.-transforming growth factor gene c-erbB, receptor, protein tyrosine kinase of, inhibitors of; receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)
IT 80449-02-1, Protein tyrosine kinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)
IT 101463-26-7
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(protein tyrosine kinase of, inhibitors of; receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)
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146871-70-7P 148741-30-4P 148741-31-5P 148741-32-6P
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170448-92-7P 170448-94-9P 170448-95-0P 170448-96-1P 170448-97-2P
170448-98-3P 170448-99-4P 170449-00-0P 170449-01-1P 170449-02-2P
170449-03-3P 170449-04-4P 170449-05-5P 170449-06-6P 170449-07-7P
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170449-13-5P **170449-14-6P 170449-15-7P**
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170449-28-2P 170449-29-3P 170449-30-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)
IT 93-91-4, Benzoylacetone 94-02-0, Ethyl benzoylacetate 98-16-8,

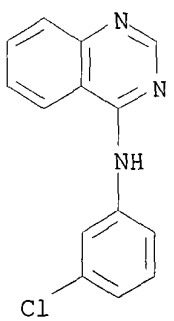
3-Trifluoromethylaniline 99-40-1 100-46-9, Benzylamine, reactions 103-79-7, Phenylacetone 105-34-0, Methyl cyanoacetate 108-42-9, 3-Chloroaniline 109-76-2, 1,3-Propanediamine 109-77-3, Malononitrile 109-80-8, 1,3-Propanedithiol 120-46-7, Dibenzoylmethane 123-54-6, Acetylacetone, reactions 139-85-5, 3,4-Dihydroxybenzaldehyde 480-96-6, Benzofuroxane 485-47-2, Ninhydrin 491-36-1, 4-Quinazolinone 579-07-7 619-45-4, Methyl 4-aminobenzoate 704-13-2, 3-Hydroxy-4-nitrobenzaldehyde 868-54-2, Malononitrile dimer 1074-12-0, Phenylglyoxal 1194-98-5, 2,5-Dihydroxybenzaldehyde 1620-98-0 2038-57-5, 3-Phenylpropylamine 2078-54-8, 2,6-Diisopropylphenol 2233-18-3, 3,5-Dimethyl-4-hydroxybenzaldehyde 2941-78-8, 5-Methyl-2-aminobenzoic acid 3171-45-7, 4,5-Dimethyl-1,2-phenylenediamine 4389-45-1, 2-Amino-3-methylbenzoic acid 5348-42-5, 4,5-Dichloro-1,2-phenylenediamine 5438-36-8, 5-Iodovanillin 7357-70-2 7605-28-9, Phenylsulfonylacetonitrile 10412-93-8, N-Benzylcyanoacetamide 13790-39-1, 4-Chloro-6,7-dimethoxyquinazoline 14268-66-7, 3,4-Methylenedioxyaniline 16414-34-9 24522-30-3 27869-04-1 37463-94-8, Sulfonyldiacetonitrile 40018-25-5 54711-21-6 58421-79-7, 4-Chloro-6-methylquinazoline 105640-66-2 133550-33-1 168835-79-8 170449-34-0 170449-35-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)

IT 1960-77-6P 5190-68-1P, 4-Chloroquinazoline 10537-86-7P 19181-53-4P 19181-54-5P 27389-84-0P 29634-62-6P 58421-80-0P 111233-69-3P 170449-31-7P 170449-32-8P 170449-33-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)

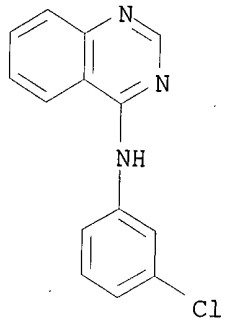
IT 62229-50-9, EGF 79079-06-4, EGF receptor protein tyrosine kinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(receptor, protein tyrosine kinase of, inhibitors of; receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)

IT **88404-44-8P 146871-70-7P 153436-53-4P 170449-14-6P 170449-15-7P 170449-16-8P 170449-17-9P 170449-18-0P 170449-19-1P 170449-20-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(receptor tyrosine kinase inhibitors for inhibiting cell proliferative disorders)

RN 88404-44-8 HCAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)- (9CI) (CA INDEX NAME)



RN 146871-70-7 HCAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 153436-53-4 HCAPLUS
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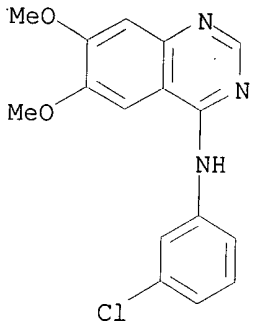

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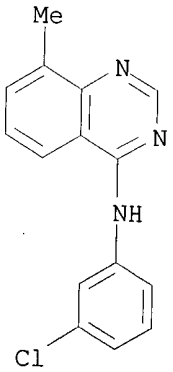
CN 4-Quinazolinamine, N-(3-chlorophenyl)-8-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



HCl

RN 170449-15-7 HCAPLUS
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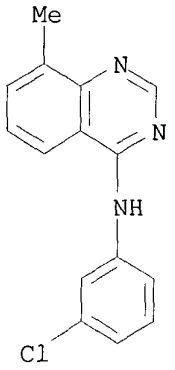
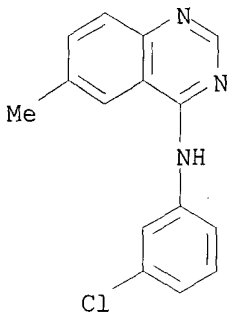
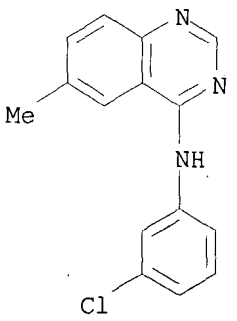


RN 170449-16-8 HCAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-6-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

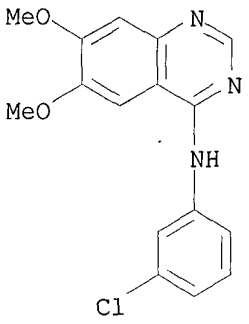


● HCl

RN 170449-17-9 HCAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-6-methyl- (9CI) (CA INDEX NAME)



RN 170449-18-0 HCAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-6,7-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 170449-19-1 HCAPLUS
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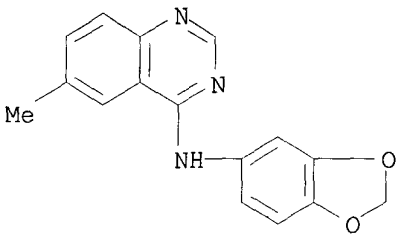

● HCl

RN 170449-20-4 HCAPLUS
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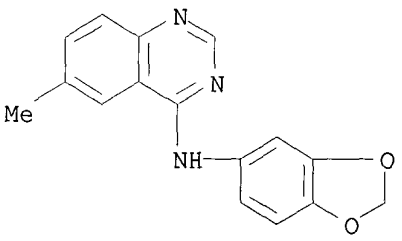

L92 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN 1995:861279 HCAPLUS
DN 124:21813
TI Treatment of platelet-derived growth factor related disorders such as cancers using inhibitors of platelet-derived growth receptor
IN Hirth, Klaus Peter; Schwartz, Donna Pruess; Mann, Elaina; Shawver, Laura Kay; Keri, Gyorgy; Szekely, Istvan; Bajor, Tamas; Haimichael, Janis; Orfi, Laszlo; et al.
PA Sugen, Inc., USA; Biosignal Ltd.; Yissum Research Development Co.; Max-Planck-Gesellschaft zur Forderung der Wissenschaften v.V.; Regents of

the University of California
SO PCT Int. Appl., 154 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-42
ICS A61K031-275; A61K031-415; A61K031-40; A61K031-535; C07C251-86; A61K031-505; A61K031-47; A61K031-495; A61K031-44; A61K031-165; C07D231-38; C07D239-88; C07D241-42; C07D487-04; C07C255-23; C07C255-41
CC 1-12 (Pharmacology)
Section cross-reference(s): 2, 28, 63
FAN.CNT 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9519169	A2	19950720	WO 1995-US363	19950106 <--
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AU 9878832	A1	19981008	AU 1998-78832	19980806 <--
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PRAI US 1994-179570	A	19940107 <--		
EP 1995-907382	A3	19950106 <--		
WO 1995-US363	W	19950106 <--		

OS MARPAT 124:21813
AB Compds. are disclosed which can inhibit platelet-derived growth factor receptor (PDGF-R) activity; preferably, such compds. also inhibit the activity of other members of the PDGF-R superfamily and are selective for members of the PDGF-R superfamily. The PDGF-R superfamily includes PDGF-R and PDGF-R-related kinases Flt and KDR. The featured compds. are active on cell cultures to reduce the activity of the PDGF-R and preferably .gtoreq.1 PDGF-R-related kinases. Using the present application as guide, other compds. able to inhibit PDGF-R and preferably Flt and/or KDR can be obtained. Such compds. are preferably used to treat patients suffering from cell proliferative disorders characterized by inappropriate PDGF-R activity. Compd. A10 (leflunomide) inhibited PDGF-R autophosphoryation, PDGF-stimulated DNA synthesis, cell cycle progression, and a variety of tumor types. Prepn. and biol. testing of a large no. of other compds. is included.
ST PDGF receptor inhibitor prepn therapeutic; antitumor PDGF receptor inhibitor prepn; leflunomide PDGF receptor inhibition cancer treatment
IT Immunoglobulins
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(leflunomide effect on immune response in relation to platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT **Brain**
Cell cycle
Cell proliferation
Deoxyribonucleic acid formation
Fibrosis
Neoplasm inhibitors
Phosphorylation, biological
(platelet-derived growth factor inhibitors and their prepn. for treatment of **cancer** and other PDGF-related disorders)

IT **Cytotoxic agents**
(platelet-derived growth factor inhibitors, their prepn. for treatment of cancer and other PDGF-related disorders, and their use with cytotoxic agents)

IT **Neoplasm inhibitors**
(Kaposi's sarcoma, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT Lymphocyte
(T-cell, cytotoxic, leflunomide effect on immune response in relation to platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT Antiarteriosclerotics
(antiatherosclerotics, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT Animal growth regulator receptors
Receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(blood platelet-derived growth factor, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT Animal growth regulators
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(blood platelet-derived growth factors, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT **Neoplasm inhibitors**
(**brain**, platelet-derived growth factor inhibitors and their prepn. for treatment of **cancer** and other PDGF-related disorders)

IT **Neoplasm inhibitors**
(colon, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT Intestine, neoplasm
(colon, inhibitors, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT Receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(epidermal growth factor/.alpha.-transforming growth factor, gene c-erbB, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT **Neoplasm inhibitors**
(epidermoid, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT Liver, disease
(fibrosis, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT **Neoplasm inhibitors**
(glioma, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT **Brain, neoplasm**
Lung, neoplasm
Ovary, neoplasm
(inhibitors, platelet-derived growth factor inhibitors and their prepn. for treatment of **cancer** and other PDGF-related disorders)
IT Lymphokines and Cytokines
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(interleukin 6, leflunomide effect on immune response in relation to platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT **Neoplasm inhibitors**
(leukemia, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT **Neoplasm inhibitors**
(lung, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT **Neoplasm inhibitors**
(mammary gland, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT **Neoplasm inhibitors**
(melanoma, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT Kidney, disease
(mesangial proliferative glomerulonephritis, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT Mammary gland
Neuroglia
Prostate gland
(neoplasm, inhibitors, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT **Neoplasm inhibitors**
(ovary, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT Receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(p185c-erbB2, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT Blood vessel, disease
(proliferative, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT **Neoplasm inhibitors**
(prostate gland, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(vascular endothelial growth factor, gene KDR, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT Receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(vascular endothelial growth factor, gene flk-1, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(vascular endothelial growth factor, gene flt-1, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)
IT Animal growth regulator receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.alpha.-transforming growth factor gene c-erbB, platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT 50-99-7, Dextrose, biological studies 67-68-5, DMSO, biological studies 100-51-6, Benzenemethanol, biological studies 9005-65-6, Polysorbate 80 25322-68-3
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(leflunomide efficacy with respect to formulation)

IT 75706-12-6P, Leflunomide
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)
(platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT 146535-11-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT 5021-43-2P 6940-85-8P 14548-00-6P 15950-40-0P **21561-09-1P**
40353-41-1P 57433-51-9P 62004-16-4P, 2-Butenamide, 2-cyano-3-hydroxy-N-(4-nitrophenyl)- 71897-07-9P 78751-23-2P
103977-08-8P 124844-98-0P 133900-14-8P 136186-01-1P 143993-60-6P
158081-91-5P 158081-92-6P, 1H-Pyrazole-3-acetonitrile, 5-amino-4-cyano-.alpha.-[[1-[2-(dimethylamino)ethyl]-1H-indol-3-yl]methylene]- 158102-45-5P 158102-46-6P 160953-96-8P 167018-37-3P
167018-39-5P 167427-78-3P 168835-90-3P 168835-98-1P 169120-19-8P
169120-20-1P 169120-22-3P 169120-23-4P 169120-25-6P 169120-26-7P
169120-27-8P 169120-28-9P 169120-29-0P 169120-30-3P 169120-31-4P
169120-32-5P 169120-33-6P 169120-34-7P 169120-35-8P 169120-36-9P
169120-37-0P 169120-38-1P 169120-39-2P 169120-40-5P 169120-41-6P
169120-42-7P 169120-43-8P 169120-44-9P 169120-45-0P 169120-46-1P
169120-47-2P 169120-48-3P 169120-49-4P 169120-50-7P 169120-57-4P
169120-58-5P 169120-71-2P 169120-72-3P 171828-64-1P 172868-04-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT 168835-89-0 169120-52-9 169120-54-1 169120-55-2 169120-56-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT 80449-02-1, Tyrosine kinase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT 169120-18-7P
RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); USES (Uses)
(platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT 75-36-5, Acetyl chloride 89-98-5, 2-Chlorobenzaldehyde 90-02-8, 2-Hydroxybenzaldehyde, reactions 90-04-0, 2-Methoxyaniline 91-16-7, Veratrole 94-02-0 94-70-2, 2-Ethoxyaniline 95-54-5, o-Phenylene diamine, reactions 95-92-1, Diethyl oxalate 99-09-2, 3-Nitroaniline 99-40-1 99-56-9 99-98-9, (4-Dimethylamino)aniline 100-01-6, 4-Nitroaniline, reactions 100-19-6 100-46-9, Benzylamine, reactions 100-83-4, 3-Hydroxybenzaldehyde 103-80-0, Phenylacetyl chloride 105-56-6, Cyanoacetic acid ethyl ester 107-91-5, 2-Carboxamidoacetonitrile 107-95-9, .beta.-Alanine 108-12-3, Isovaleryl chloride 108-24-7, Acetic anhydride 118-92-3, Anthranilic acid 123-08-0, 4-Hydroxybenzaldehyde 139-85-5, 3,4-Dihydroxybenzaldehyde 298-12-4 328-74-5, 3,5-Bis(trifluoromethyl)aniline 352-11-4, 4-Fluorobenzyl chloride 372-09-8, Cyanoacetic acid 452-58-4, 2,3-Diaminopyridine 455-14-1, 4-Trifluoromethylaniline 487-89-8, 3-Formylindole 496-15-1, Indoline 496-72-0, 3,4-Diaminotoluene 527-72-0, Thiophene-2-carboxylic acid 540-37-4, p-Iodoaniline 591-27-5, 3-Hydroxyaniline 611-73-4, Benzoyl formic acid 626-01-7, m-Iodoaniline 771-97-1, 2,3-Diaminonaphthalene 868-54-2, Malononitrile dimer 1075-06-5, Phenyl glyoxal hydrate 1125-80-0, 3-Methylisoquinoline 1196-69-6, 5-Formylindole 1620-98-0 1871-76-7, Diphenylacetyl chloride 2251-50-5, Pentafluorobenzoyl chloride 3171-45-7, 4,5-Dimethyl-1,2-phenylenediamine 3586-15-0, 3-Phenoxybenzoyl chloride 4974-57-6, 4-Nitrophenyl glyoxal 5394-63-8, 2,2,6-Trimethyl-4H-1,3-dioxin-4-one 5653-40-7, 4,5-Dimethoxy-2-aminobenzoic acid 7357-70-2 13677-79-7, 3,4,5-Trihydroxybenzaldehyde 16414-34-9 19650-95-4 23860-35-7, Cyclohexylacetyl chloride 31301-45-8, 3,5-Dimethylisoxazole-4-carbonyl chloride 37463-94-8, Sulfonyl diacetonitrile 39070-63-8 41927-01-9, 3,4-Dimethyl-1,2-phenylenediamine 105640-66-2 111233-69-3 133550-31-9 133550-33-1 133550-57-9 168836-05-3 169120-63-2 169120-64-3 169120-65-4 169120-66-5 169120-67-6 169120-68-7 169120-69-8 169120-70-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT 351-87-1P 785-74-0P 3395-03-7P, 1,2-Dinitro-4,5-dimethoxybenzene 7267-26-7P 7501-69-1P 10376-59-7P 13790-39-1P, 4-Chloro-6,7-dimethoxyquinazoline 13794-72-4P 21774-44-7P 22208-39-5P 24439-50-7P 24451-13-6P 24522-30-3P 28082-82-8P, 6,7-Dimethylquinoxaline-2-one 29067-81-0P, 2-Chloro-6,7-dimethylquinoxaline 40821-48-5P 53117-23-0P 53117-28-5P 54711-21-6P 61643-55-8P 67394-73-4P 75706-11-5P 105780-30-1P, 2-Methoxy-4,5-dinitrophenol 127916-11-4P 169120-60-9P 169120-61-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT 169120-62-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT 61643-23-0P 143993-59-3P, Imidazo[5,1-b]quinazolin-9(1H)-one, 2,3-dihydro-1-(2-hydroxyphenyl)-3-methyl-2-(phenylmethyl)- 143993-61-7P 169120-73-4P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT 134888-93-0 169120-51-8 169120-53-0
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

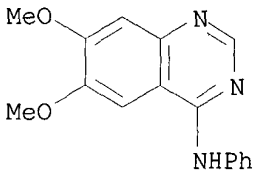
IT 15663-27-1, Cisplatin 33419-42-0, VP-16
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(platelet-derived growth factor inhibitors, their prepn. for treatment of cancer and other PDGF-related disorders, and their use with cytotoxic agents)

IT 62229-50-9, EGF
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(receptor; platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

IT **21561-09-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(platelet-derived growth factor inhibitors and their prepn. for treatment of cancer and other PDGF-related disorders)

RN 21561-09-1 HCAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-phenyl- (9CI) (CA INDEX NAME)



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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

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L63 ANSWER 1 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA64:11208d CAOLD
TI antibacterials - (VII)
AU Goud, A. Nagana; Jamkhandi, P. S.; Rajagopal, S.
IT **3458-43-3** **3458-44-4** **3458-45-5**
3458-46-6 **3458-47-7** **3458-48-8**
3458-49-9 **3458-50-2** **3545-15-1** 5271-13-6
5271-14-7 5271-15-8 5271-16-9 5375-97-3

L63 ANSWER 2 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA59:627h CAOLD
TI reaction of 4-quinazolinecarbonitrile with nucleophilic reagents - (II) with Grignard reagents, (III) with ketones, (IV) with active methylene

compds.
AU Higashino, Takeo
IT 491-36-1 603-23-6 700-46-9 963-80-4 1087-99-6 1221-88-1
1701-95-7 2400-93-3 2400-95-5 2400-97-7 2473-93-0 2603-56-7
4127-49-5 13905-52-7 16332-86-8 17629-01-5 22522-59-4 22522-60-7
25326-52-7 25330-81-8 36082-71-0 36925-12-9 36926-85-9 80602-16-0
91391-93-4 91806-26-7 91902-13-5 91954-88-0 92057-17-5
92437-11-1 92872-63-4 93333-17-6 **94878-99-6**

L63 ANSWER 3 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA58:9267h CAOLD
TI residual oily soil as a factor in yellowing of used and laundered white cotton articles
AU McLendon, Verda; Richardson, F.
IT 5395-37-9 17329-27-0 17329-31-6 27440-42-2 **34932-33-7**
51829-62-0 59674-85-0 90004-09-4 **92193-49-2**
93016-25-2 **93533-57-4** **93734-34-0**
93734-39-5 **94539-18-1** **94539-19-2** 105164-82-7

L63 ANSWER 4 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA58:9267a CAOLD
TI photographic layers for the Ag bleach process
PA CIBA Ltd.
DT Patent

PATENT NO.	KIND	DATE
BE 611898		
CH 404398		
DE 1138318		
GB 940286		
US 3211555		1965

IT 69220-17-3 74094-65-8 **93871-19-3** **94068-90-3**
94255-57-9 94544-57-7 **95157-12-3** 96170-29-5 96763-40-5
103070-46-8 103102-35-8 105793-24-6 107279-31-2

L63 ANSWER 5 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA58:5682c CAOLD
TI 3-p-toluenesulfonyl-4-quinazolinone and some of its reactions
AU Bunnett, Joseph F.; Bassett, J. Y.
IT 5465-78-1 **6344-76-9** 16347-60-7 92191-95-2 92966-52-4
92966-53-5

L63 ANSWER 6 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA58:4564c CAOLD
TI aryl .beta.-amino acids - (II) .beta.-phenyl-.beta.-ureido acids and related compds., (III) action of POCl3 on 6-aryl-5,6-dihydrouracils
AU Chernova, N. G.; Berlin, A. Ya.
IT 733-70-0 6300-95-4 90840-43-0 90872-08-5 90946-83-1 91646-91-2
91687-58-0 **91961-23-8** **91961-24-9** 91961-30-7
92026-80-7 **92104-32-0** **92104-33-1** 92104-44-4
92796-81-1 92796-82-2 92866-48-3 92866-49-4 93042-57-0 93256-37-2
93283-90-0 93439-93-1 93569-10-9 93864-49-4

L63 ANSWER 7 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA58:4563h CAOLD
TI substituted phenyl quinazolyl sulfides and sulfones - (I), (II) 4-hydroxychlorophenyl 4-quinazolyl sulfides and sulfones
AU Badiger, Virupax V.; Nargund, K. S.
IT **23945-54-2** 91961-28-3 91961-29-4 92104-39-7
92104-51-3 **92188-63-1** **92188-64-2**
92188-65-3 **92188-66-4** 93256-36-1 93354-15-5
93354-26-8

L63 ANSWER 8 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA58:4563e CAOLD
TI substituted phenyl quinazolyl ethers
AU Badiger, Virupax V.; Nargund, K. S.
IT **83529-86-6** **91961-12-5** **91961-18-1**
91961-19-2 **91961-20-5** **92060-62-3**
92104-24-0 **92104-25-1** **92167-51-6**
92437-27-9 **92437-28-0** 92868-56-9 **92905-84-5**
93256-33-8 **93354-13-3** **93866-11-6**
93866-12-7 **93866-13-8** **94064-23-0** 94205-75-1
94753-50-1 **94802-96-7** **96417-92-4**
96433-79-3 **96652-95-8** **96652-96-9**

L63 ANSWER 9 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA58:1475c CAOLD
TI piperazines
AU Morren, Henri
DT Patent

PATENT NO.	KIND	DATE
PI BE 614177		
DE 1178435		
FR M1932		
GB 938646		
US 3163649		1964

IT 16064-11-2 16064-13-4 16064-14-5 16064-23-6 16347-95-8 16347-96-9
16347-97-0 17329-31-6 19181-54-5 19181-64-7 20386-24-7
92493-50-0 92493-51-1 92493-68-0 93808-18-5 93808-19-6 93808-34-5
97213-43-9

L63 ANSWER 10 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA58:521d CAOLD
TI polyazanaphthalenes - (VII) derivs. of quinazoline and 1,3,5-triazanaphthalene
AU Oakes, Vincent; Rydon, H. N.; Undheim, K.
IT 1955-60-8 1955-61-9 1955-62-0 1955-63-1 2312-90-5 19181-53-4
21419-47-6 39576-82-4 50440-82-9 51989-24-3 58421-79-7 62484-16-6
87610-96-6 90537-56-7 91647-26-6 92043-92-0 92327-92-9
92554-57-9 92659-18-2 92872-02-1 93020-69-0 93734-33-9
94066-18-9 94207-37-1 94872-21-6 95225-61-9 96581-92-9 97191-89-4
100150-39-8 100266-92-0 100768-45-4

L63 ANSWER 11 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA57:7269g CAOLD
TI reaction of anthranilonitrile and N-methyl-anthranilonitrile with phenyl isocyanate and phenyl isothiocyantae
AU Taylor, Edward C.; Ravindranathan, R. V.
IT 491-36-1 607-19-2 1885-29-6 4248-15-1 13114-96-0 13906-09-7
14505-32-9 17583-40-3 18741-24-7 21097-36-9 **34923-95-0**
35565-62-9 **35696-83-4** 53412-77-4 67461-76-1
67461-77-2 73987-32-3 92165-07-6 92554-63-7 92554-69-3
92554-70-6 92555-54-9 92969-09-0

L63 ANSWER 12 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA55:5516c CAOLD
TI 2-deoxy-D-ribose - (IV) direct synthesis of 2'-deoxyadenosine and its anomer through 2-deoxy-D-ribose derivs.
AU Ness, Robert K.; Fletcher, H. G., Jr.
IT 958-09-8 3413-66-9 6324-83-0 **34923-95-0** 99828-33-8
102048-79-3 108747-25-7 108942-64-9 112484-75-0 113134-87-5 121124-08-1

L63 ANSWER 13 OF 20 HCAOLD COPYRIGHT 2003 ACS

AN CA55:5515i CAOLD
TI reaction of 4-quinazolinecarvonitrile with nucleophilic reagents - (I)
AU Higashino, Takeo
IT 491-36-1 16347-95-8 16347-96-9 **16347-97-0** 22754-07-0
36075-44-2 36082-71-0 41229-10-1 41270-82-0 60262-41-1

L63 ANSWER 14 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA54:14706c CAOLD
TI dyes (anthraquinone vat)
PA Badische Anilin- & Soda-Fabrik Akt.-Ges.
DT Patent
TI vat-dye filter cakes, conditioning of
PA Allied Chemical Corp.
DT Patent

	PATENT NO.	KIND	DATE
PI	GB 829699		
	DE 1073130		
	DE 1073132		
PI	US 2930792		1960

IT **102442-56-8** 104510-69-2 106168-09-6 108247-01-4 108247-02-5
108722-09-4 108988-84-7 109534-95-4 114327-73-0

L63 ANSWER 15 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA51:15527e CAOLD
TI prepn. of quinazoline derivs. through ringclosure of aromatic o-cyano acylamino compds. in alk. alc. or phenolic medium - (I) 4-RO-substituted quinazolines
AU Breukink, K. W.; Krol, L. H.; Verkade, P. E.; Wepster, B. M.
IT 491-36-1 635-21-2 1022-45-3 1885-29-6 5190-68-1 5922-60-1
16347-95-8 22302-63-2 25116-00-1 26060-03-7 **34297-92-2**
36253-00-6 40288-69-5 53312-90-6 53902-59-3 63069-48-7 91350-36-6
96461-53-9 98947-27-4 99853-58-4 101423-45-4 101443-82-7 101871-79-8
102467-33-4 107519-02-8 110249-21-3 110249-22-4 130862-63-4

L63 ANSWER 16 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA51:12988e CAOLD
TI N-alkyl-2-amino-4-hydroxy-5-pyrimidine-carboxamides (basically substituted) and salts thereof
PA Searle, G. D., & Co.
DT Patent
TI basically substituted N-alkyl-2-amino-4-hydroxy-5-pyrimidinecarboxyamides and salts thereof
AU Rorig, Kurt J.; Nicholsen, R. T.
DT Patent
TI quinazoline derivs.
AU Spinks, Alfred; Young, E. H. P.
PA Imperial Chemical Industries Ltd.
DT Patent

	PATENT NO.	KIND	DATE
PI	US 2789979		1957
PI	US 2794018		1957

IT 19815-15-7 79689-29-5 98436-60-3 98556-36-6 98556-99-1 99069-45-1
99069-46-2 99178-94-6 99584-26-6 99584-27-7 100061-70-9 100120-59-0
100541-03-5 100970-63-6 101872-19-9 101872-20-2 102879-85-6
104037-04-9 104741-28-8 108106-00-9 117147-24-7

L63 ANSWER 17 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA51:9625b CAOLD
TI potential amebicides - (III) synthesis of 4-substituted amino-8-hydroxy(and 8-methoxy) quinazolines and 3-substituted 8-hydroxy(and 8-methoxy)-4-quinazolones

AU Iyer, R. N.; Anand, N.; Dhar, M. L.
IT 16064-17-8 16064-27-0 90417-39-3 90915-44-9 90915-46-1 91351-03-0
91351-04-1 91567-04-3 91567-06-5 91820-23-4 92108-42-4 92327-15-6
92327-16-7 92437-62-2 92703-59-8 95126-63-9 100060-90-0 100373-89-5
100705-56-4 100705-57-5 100705-58-6 100719-79-7 **100865-50-7**
100951-83-5 101012-61-7 **101094-90-0** 101284-88-2 101350-82-7
101436-97-9 101494-80-8 101740-34-5 101867-72-5 102371-40-4 102875-01-4
103039-18-5 104296-29-9 104510-25-0 104742-93-0 106739-73-5 106883-65-2
107154-28-9 **108717-76-6** 108717-98-2 110147-73-4 110147-74-5
112441-16-4 113796-28-4 131869-04-0

L63 ANSWER 18 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA51:6646a CAOLD
TI synthesis of 2,4-diaryloaminoquinazoline and its derivs. - (II)
AU Dymek, Wojciech; Malicki, J.; Waksmundzka, A.
IT 4603-59-2 17284-97-8 19064-67-6 40954-04-9 58826-43-0 59019-09-9
67449-23-4 98334-49-7 98489-60-2 99419-04-2 99984-42-6 102442-17-1
103505-53-9 **108719-42-2** 113510-84-2 115209-85-3 116212-93-2

L63 ANSWER 19 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA51:5095d CAOLD
TI reactions of acetamide with aniline and phenylisothiocyanate
AU Dymek, Wojciech; Brzozowska, N.; Brzozowski, T.
IT 27142-44-5 **67461-77-2 101101-77-3** 102477-60-1
102754-69-8 110060-39-4 **111936-87-9** 114331-20-3 115145-19-2
115209-55-7

L63 ANSWER 20 OF 20 HCAOLD COPYRIGHT 2003 ACS
AN CA51:1303g CAOLD
TI 2-(.gamma.-diethylaminopropoxy)-4,6-dimethylpyrimidine and its salts
AU Burtner, Robert R.
PA Searle, G. D., & Co.
DT Patent

PATENT NO.	KIND	DATE
US 2748123		1956

IT 98556-99-1 **100541-03-5** 106037-87-0 106037-88-1 117147-24-7

=> d his

(FILE 'HOME' ENTERED AT 16:39:15 ON 11 JUN 2003)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 16:39:56 ON 11 JUN 2003
E UCKUN F/AU
L1 432 S E4-E9
L2 5 S L1 AND (CJUN OR C JUN)
L3 28 S L1 AND (JAK3 OR JAK 3)
L4 17 S L1 AND (JANUS KINASE OR JANUSKINASE)()3
L5 2 S L2 AND L3,L4
L6 1 S L5 AND P/DT
SEL RN

FILE 'REGISTRY' ENTERED AT 16:41:54 ON 11 JUN 2003
L7 6 S E1-E6
L8 2 S L7 AND 3/NR
SEL RN
L9 20 S E7-E8/CRN

FILE 'HCAOLD' ENTERED AT 16:43:49 ON 11 JUN 2003
L10 0 S L8 OR L9

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     FILE 'USPATFULL, USPAT2' ENTERED AT 16:43:53 ON 11 JUN 2003
L11          33 S L8 OR L9
                E UCKUN F/AU
L12          31 S E4-E8 AND L11
                E WAYNE/PA
L13           0 S E21 AND L11
                E PARKER/PA,CS
L14          25 S E109,E110 AND L11
L15          33 S L11,L12,L14
L16           1 S L15 AND (PD<=19980630 OR PRD<=19980630 OR AD<-19980630)
L17          32 S L15 NOT L16

     FILE 'REGISTRY' ENTERED AT 16:47:37 ON 11 JUN 2003

     FILE 'USPATFULL, USPAT2' ENTERED AT 16:48:05 ON 11 JUN 2003

     FILE 'REGISTRY' ENTERED AT 16:51:41 ON 11 JUN 2003

     FILE 'USPATFULL, USPAT2' ENTERED AT 16:52:31 ON 11 JUN 2003
L18          31 S L17 NOT COMPUTER/TI
L19          15 S L18 AND (CJUN OR C JUN OR JAK 3 OR (JANUSKINASE OR JANUS KINA

     FILE 'REGISTRY' ENTERED AT 16:55:51 ON 11 JUN 2003
                E JANUS KINASE/CN
L20           1 S E7

     FILE 'USPATFULL, USPAT2' ENTERED AT 16:57:52 ON 11 JUN 2003
L21          38 S L20
L22          49 S (JAK3 OR JAK 3)()(KINASE OR PROTEIN KINASE OR TYROSINE KINASE
L23         107 S JAK KINASE
L24         152 S L21-L23
L25          14 S L18 AND L24
L26          15 S L19,L25
L27          15 S L26 AND L17
L28           0 S L27 AND (CJUN OR C JUN)
L29          32 S L17,L25-L27

     FILE 'REGISTRY' ENTERED AT 16:59:48 ON 11 JUN 2003

     FILE 'USPATFULL, USPAT2' ENTERED AT 17:00:41 ON 11 JUN 2003

     FILE 'HCAPLUS' ENTERED AT 17:01:09 ON 11 JUN 2003
L30          37 S L8 OR L9
L31          33 S WHI()(P131 OR P154 OR P()(131 OR 154)) OR WHIP131 OR WHIP154
L32          44 S L30,L31
L33           8 S L32 AND (PD<=19980630 OR PRD<=19980630 OR AD<=19980630)
L34           6 S L33 AND L1
L35           6 S L33 AND (HUGHES OR WAYNE OR PARKER)/PA,CS
L36           8 S L33-L35
L37           2 S L36 AND (CJUN OR C JUN)
L38           2 S L36 AND L24
L39           1 S L36 AND (JANUSKINASE OR JANUS KINASE OR JAK3)
L40           8 S L36-L39

     FILE 'HCAPLUS' ENTERED AT 17:04:59 ON 11 JUN 2003

     FILE 'EMBASE' ENTERED AT 17:06:08 ON 11 JUN 2003
L41          25 S L32
L42           2 S L41 AND PY<=1998
                E "4 3' BROMO 4' HYDROXYLPHENYL AMINO 6 7 DIMETHOXYQUINAZOLINE"
                E "4 3 BROMO 4 HYDROXYLPHENYL AMINO 6 7 DIMETHOXYQUINAZOLINE"/C
                E "4 (3' BROMO 4' HYDROXYLPHENYL)AMINO 6,7 DIMETHOXYQUINAZOLINE
L43           4 S E3-E16
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                E "4 (4' HYDROXYPHENYL)AMINO 6,7 DIMETHOXYQUINAZOLINE"/CT
L44           6 S E3-E10
L45           0 S L43,L44 NOT L41
L46           2 S L42 AND L43,L44

     FILE 'MEDLINE' ENTERED AT 17:09:49 ON 11 JUN 2003
L47          24 S L32
L48           8 S 4 3 BROMO 4 HYDROXYLPHENYL AMINO 6 7 DIMETHOXYQUINAZOLINE OR
L49           2 S L47,L48 AND PY<=1998

     FILE 'EMBASE, MEDLINE' ENTERED AT 17:11:34 ON 11 JUN 2003
L50           2 DUP REM L46 L49 (2 DUPLICATES REMOVED)

     FILE 'EMBASE, MEDLINE' ENTERED AT 17:11:44 ON 11 JUN 2003

     FILE 'BIOSIS' ENTERED AT 17:11:52 ON 11 JUN 2003
L51          29 S L32 OR L48
L52           2 S L51 AND PY<=1998

     FILE 'BIOSIS' ENTERED AT 17:12:54 ON 11 JUN 2003

     FILE 'REGISTRY' ENTERED AT 17:13:13 ON 11 JUN 2003
L53             STR
L54          41 S L53 CSS SAM
L55        3070 S L53 CSS FUL
                SAV L55 HOPE345/A
L56             STR L53
L57          50 S L56 CSS SAM SUB=L55
L58        1124 S L56 CSS FUL SUB=L55
                SAV L58 HOPE345A/A
L59             STR L56
L60           7 S L59 CSS SAM SUB=L55
L61         135 S L59 CSS FUL SUB=L55
                SAV L61 HOPE345B/A
L62        1237 S L58,L61 NOT L8,L9

     FILE 'HCAOLD' ENTERED AT 17:26:19 ON 11 JUN 2003
L63          20 S L62

     FILE 'REGISTRY' ENTERED AT 17:27:06 ON 11 JUN 2003
L64          73 S L62 AND CAOLD/LC

     FILE 'HCAPLUS' ENTERED AT 17:27:33 ON 11 JUN 2003
L65         389 S L62
L66          18 S L65 AND L1
L67          18 S L65 AND (HUGHES? OR PARKER? OR WAYNE?)/PA,CS
L68          18 S L66,L67
L69           9 S L65 AND L24
L70           6 S L65 AND (JANUSKINASE OR JANUS KINASE)
L71           5 S L65 AND (CJUN OR C JUN)
L72         218 S L65 AND (PD<=19980630 OR PRD<=19980630 OR AD<=19980630)
L73           2 S L72 AND L68
L74           1 S L72 AND L69-L71
L75           3 S L73,L74
L76         207 S L65 AND PY<=1998
L77           0 S L76 AND L69-L71
L78         218 S L72,L76
                E GLIOBLASTOMA/CT
                E E3+ALL
L79        2709 S E2
L80         579 S E6
L81        4355 S ?GLIOBLASTOM?
                E NEUROGLIA/CT
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                E E3+ALL
L82         31326 S E5+NT
                E BRAIN NEOPLASM/CT
                E E4+ALL
                E E2+ALL
L83          4860 S E7,E6+NT
L84             9 S L78 AND L79-L83
L85             3 S L78 AND BRAIN(L)(?CANCER? OR ?TUMOR? OR ?NEOPLAS? OR ?MALIGN
L86            10 S L84,L85,L75
                E ANTITUMOR/CT
                E E5+ALL
L87        158675 S E4,E3,E20-E26
L88         30685 S E28+NT OR E29+NT OR E30+NT
L89        214899 S E31+NT
L90            73 S L78 AND L87-L89
L91             9 S L90 AND L86
L92            10 S L86,L91

     FILE 'REGISTRY' ENTERED AT 17:38:18 ON 11 JUN 2003

     FILE 'HCAPLUS' ENTERED AT 17:38:38 ON 11 JUN 2003

     FILE 'HCAOLD' ENTERED AT 17:39:06 ON 11 JUN 2003
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